

C I T Y O F L E E D S

R E P O R T
ON THE
Health & Sanitary
Administration
OF THE CITY
FOR THE YEAR 1951

BY

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Medical Officer of Health and School Medical Officer.

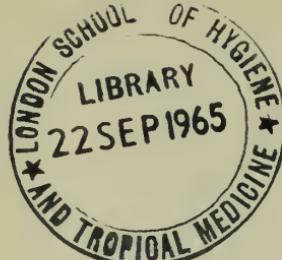


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HEALTH COMMITTEE.

LORD MAYOR (Alderman Francis Eric Tetley, D.S.O., J.P.)

Chairman : Alderman Sir GEORGE W. MARTIN, K.B.E., J.P.

Alderman DOROTHY MURPHY, J.P.	Councillor H. WALMSLEY (from 4.7.51)
„ LIZZIE NAYLOR, J.P.	„ VYVYAN M. CARDNO
„ ELIZABETH M. LISTER	„ MARGARET COLLINS
„ H. M. G. MCKAY	„ W. M. JONES
Councillor A. KING	„ MAY FISH
„ W. FOWLER	„ L. WALSH, M.D., Ch.B.
„ Z. P. FERNANDEZ, M.D.	„ LILY DEMAINNE
„ EVELINE COLEMAN	„ E. D. GLOVER
„ WINIFRED SHUTT (Deputy Chairman)	„ MARY DOWLING (to 4.7.51)
„ H. DRAKE	

EX-OFFICIO MEMBERS.

Representatives of Leeds Medical Committee (National Health Service) invited to attend in an advisory capacity :—

Dr. J. H. E. Moore and Dr. S. S. Ogilvie (or a deputy in each case).

SUB-COMMITTEES.

SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE.

Chairman : Alderman ELIZABETH M. LISTER.

Alderman DOROTHY MURPHY, J.P.	Councillor H. DRAKE
„ LIZZIE NAYLOR, J.P.	„ W. M. JONES (from 26.6.51)
Councillor EVELINE COLEMAN	„ L. WALSH, M.D., Ch.B.
„ WINIFRED SHUTT	„ LILY DEMAINNE
„ VYVYAN M. CARDNO	„ W. FOWLER (to 22.6.51)
„ MARGARET COLLINS	
„ MAY FISH	

CO-OPTED MEMBERS.

Mrs. D. BEEVERS	Miss M. HANDS
Mrs. R. H. BLACKBURN	

SUB-HEALTH (CARE AND AFTER-CARE) COMMITTEE.

Chairman : Councillor MARGARET COLLINS.

Alderman DOROTHY MURPHY, J.P.	Councillor WINIFRED SHUTT
„ LIZZIE NAYLOR, J.P.	„ VYVYAN M. CARDNO
„ ELIZABETH M. LISTER	„ L. WALSH, M.D., Ch.B.
Councillor A. King	„ LILY DEMAINNE
„ Z. P. FERNANDEZ, M.D.	„ MARY DOWLING (to 4.7.51)
„ EVELINE COLEMAN	

SUB-HEALTH (MENTAL SERVICES) COMMITTEE.

Chairman: Alderman DOROTHY MURPHY, J.P.

Alderman ELIZABETH M. LISTER	Councillor VYVYAN M. CARDNO
Councillor W. FOWLER	„ MARGARET COLLINS
„ Z. P. FERNANDEZ, M.D.	„ W. M. JONES
„ EVELINE COLEMAN	„ MAY FISH
„ WINIFRED SHUTT	„ LILY DEMAINE

The Sub-Health (Care and After-Care) Committee and the Sub-Health (Mental Services) Committee were amalgamated by resolution of the Health Committee on 22.6.51, and redesignated Sub-Health (Special Services) Committee.

SUB-HEALTH (SPECIAL SERVICES) COMMITTEE.

Chairman: Alderman DOROTHY MURPHY, J.P.

Alderman ELIZABETH M. LISTER	Councillor VYVYAN M. CARDNO
Councillor A. KING	„ MARGARET COLLINS
„ Z. P. FERNANDEZ, M.D.	„ MAY FISH
„ EVELINE COLEMAN	„ L. WALSH, M.D., Ch.B.
„ WINIFRED SHUTT	„ LILY DEMAINE
„ H. DRAKE	

CO-OPTED MEMBERS.

Mrs. A. R. INCE	Mrs. J. E. SCHOLES
Miss A. M. TONG	

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE.

Chairman: Councillor E. D. GLOVER
and all Members of the Health Committee.

As from 22.6.51 the Sub-Health (Sanitation, Food and Drugs) Committee was reconstituted as follows—

Chairman: Councillor E. D. GLOVER.

Alderman DOROTHY MURPHY, J.P.	Councillor Z. P. FERNANDEZ, M.D.
„ LIZZIE NAYLOR, J.P.	„ WINIFRED SHUTT
„ ELIZABETH M. LISTER	„ H. WALMSLEY
„ H. M. G. MCKAY	(from 4.7.51)
Councillor A. KING	„ MARGARET COLLINS
„ W. FOWLER	„ LILY DEMAINE

PUBLIC HEALTH STAFF.

Medical Officer of Health, Chief Tuberculosis Officer and School Medical Officer	I. G. DAVIES, M.D., B.S., M.R.C.P., M.R.C.S., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Chief Assistant School Medical Officer	M. E. WILLCOCK, M.B., Ch.B., D.P.H.
Medical Officer for Mental Health Services	J. M. MCALPIN, M.B., Ch.B.
Chief Assistant Medical Officer for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Assistant Medical Officer of Health in charge of Immunisation	G. R. BAXTER, M.D., B.Ch.D. D.P.H., D.T.M. & H.
Honorary Assistant Medical Officer of Health (by arrangement with the University of Leeds)	C. W. DIXON, M.D., D.P.H., D.L.O., D.C.H., Senior Lecturer in Public Health, University of Leeds
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S.
	MARIA A. BELDON, M.B., Ch.B.
	EUGENIE C. ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P.
	JESSIE I. ROSIE, M.B., Ch.B., D.P.H.
	M. N. M. PAULIN, M.B., Ch.B., B.A.O., D.P.H.
	ELIZABETH HOFFA, L.R.C.P., L.R.C.S., D.C.H.
	FRANCES E. SMITH, M.B. Ch.B., D.P.H.
	A. MACFARLANE, M.B., Ch.B., D.P.H.
Chief Administrative Assistant ..	P. A. WOODCOCK
Executive Officer, Mental Health Services	J. SQUIRE HOYLE
Accountant	H. A. CORLETT (from 1.9.51)
Assistant Administrative Officer ..	A. BATLEY
Chief Sanitary Inspector	J. GOODFELLOW, M.R.San.I., A.M.I.S.E.
Consultant Adviser in Tuberculosis ..	J. ASPIN, M.A., M.D., M.B., B.Chir., M.R.C.S., L.C.R.P., D.M.R.D.
Consultant Adviser, Infectious Diseases	E. C. BENN, M.B., Ch.B., D.P.H.
Consultant in Child Health	Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists	Professor D. R. MACCALMAN, M.D., I. SUTTON, M.Sc., M.D., D.P.M., L.R.C.P., M.R.C.S.
	H. BURT, M.D., Ch.B., D.P.M.
	A. H. WILSON, M.B., Ch.B., D.P.M.

Consultant Adviser in Venereal Diseases	G. O. HORNE, F.R.C.P. (Edin.)
City Bacteriologist	Professor J. W. McLEOD, F.R.S., M.B., Ch.B.
City Analyst	C. H. MANLEY, M.A., F.R.I.C.
Supervisor, Disinfecting and Disinfestation Stations	C. W. LAMB, M.R.San.I. M.S.I.A.
Ambulance Officer	F. E. J. LARGE
Superintendent Health Visitor and School Nurse	MATHILDE BURKE, S.R.N., S.C.M.
Supervisor of Midwives	DOROTHY HUMPHREYS, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	EDITH G. MEADOWS, S.R.N., S.C.M.
Home Help Organiser	Mrs. DOROTHY W. ALFORD
Convalescent Scheme Organiser ..	Mrs. WINIFRED LINSLEY
Principal Clerks :—	
Finance	A. R. BEST (to 19·5·51)
Statistics	W. B. NOTTAGE
General Sanitation	C. STEAD
Infectious Diseases	J. K. BEEVERS
Food and Drugs	S. TITTERINGTON

PUBLIC HEALTH DEPARTMENT.

STAFF.

	<i>Class of Employees</i>						<i>No. employed at 31/12/51</i>
Sanitary Inspectors	50
Assistant Analysts	3
Female Sanitary Inspectors	2
Health Visitors	53
Midwives	48
Scabies and Pediculosis Visitors, Nurses and Attendants	6
Tuberculosis Health Visitors	8
Dispensers	11
Physiotherapists	5
Clerical Staff	87
Disinfecting Staff	11
Disinfestation Staff	14
Central Ambulance Station Staff	128
Flushing Staff	9
Mortuary Service	7
Rodent Operatives	7
Immunisation Nurses	7
Lavatory Attendants	19
Lavatory Cleaners	2
Caretakers and Cleaners	28
Home Helps	146
Factory-in-the-Field	41
Wyther Hostel	10
Red Court Hostel	32
Day Nurseries	278
Infectious Diseases Visitors	2
Clinic Nurses	8
Student Health Visitors	13
Social Workers	5
Condemned Meat Room Attendant	1
House Disinfestation	3
Nursery Teachers	2
District Nurses	8
Warden, Convalescent Home	1

City of Leeds.

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health on the health of the City of Leeds for 1951.

In order to carry out their functions as overseers of the health of the city, members of the Health Committee are required to serve a much wider range of duties and interests than would at first sight be implied by membership of a single committee of the Council. The ramifications of the field of health involve the service of members on a large number of other statutory authorities and advisory committees all dealing with various aspects of the public health whose activities cannot be separated from each other and are all directed to one end.

The oversight of the public health therefore demands not only close co-ordination within the Local Authority itself but with other statutory bodies either by representation thereon of Health Committee members or by administrative co-ordination through officers of the Committee.

Within the Local Authority itself the Health Committee and its officers are required to work in collaboration with the Welfare Services, Blind Welfare, Childrens', Housing, Education, Town Planning and Cleansing Committees, since the functions of all these committees impinge at various points on the statutory duties of the Health Committee. Nor is this co-ordination a mere facade but represents an active working day to day collaboration between both members and officers.

The Health Committee is represented directly or indirectly by its members on a number of separate statutory bodies and committees, particularly in relation to the National Health Service. Chief among these are the Leeds 'A' and 'B' Groups Management Committees of the Regional Board : the Executive Council for the General Medical, Dental and Pharmaceutical Services ; the Liaison Committee of Local

Health Authorities with the Regional Board and the Joint Geriatric Committee of the Regional Board. In addition to these the Health Committee is directly represented by members on the following :—

The Conference of representatives of Local Authorities for the co-ordination of Ambulance Services.

The Rehabilitation Committee of Group 'A' Management Committee.

Joint Committee of District Nursing Associations.

Association of Municipal Corporations' Public Health Committee and County Milk and Dairies Advisory Committee.

Ministry of Agriculture Area Planning and Advisory Committee for Rats and Mice Destruction.

West Riding of Yorkshire Regional Smoke Abatement Committee.

The National Smoke Abatement Society.

Leeds Council of Social Service.

National Society of Childrens' Nurseries.

Leeds Home and Child Joint Committee of Royal Society for Prevention of Accidents.

St. Faith's Association for Moral Welfare.

Salvation Army Home, Mount Cross.

Browning House.

St. Margaret's Home.

Leeds Babies Welcome Association.

Membership of the Health Committee and its sub-committees is clearly no light task either in respect of time or energy, indeed the foregoing list rather understates the position since membership of a Management Committee or of the Executive Council involves membership of several sub-committees.

The health of the city as judged by such indices as the notifications and deaths from infectious diseases and by the infant mortality rate has been on the whole good throughout the year. Deaths from pulmonary tuberculosis, which between 1932 and 1940 averaged about 6 per cent. of the total deaths from all causes in the city, declined steadily from 1940 to a figure of 2 4 per cent. of the total deaths in 1951.

In 1932 deaths from diseases of the heart and circulatory system (coronary disease, other forms of heart disease, cerebral haemorrhage, arterio sclerosis, myocardial disease) accounted for 34·5 per cent. of the total deaths in the city. In 1942 and 1951 these deaths accounted for 43 per cent. and 44 per cent. respectively of the total deaths.

Deaths from all forms of cancer in 1932 accounted for 11·75 per cent. of the total deaths from all causes. Deaths from cancer have been slowly but surely increasing, the increase being more apparent since 1940. In 1950 and 1951 deaths amounted to 17 per cent. and 15 per cent. respectively of the total deaths from all causes. Deaths from cancer of the lung have increased steadily since 1930. In 1930 deaths from cancer of the lung amounted to 42. Taking an average of the deaths over three year periods since 1930, the average deaths from cancer of the lung in these triennial periods have been of the following order :— 63, 88, 113, 106, 152, 167, 186. The number of deaths in 1951 was 168. The highest number of deaths since 1930 was 208, recorded in 1950. Expressed in terms of rates per 1,000 of the population the mortality rates from cancer of the lung are as follows :—

<i>In 1930 the rate per thousand was 0·08</i>
„ 1940 „ „ „ 0·21
„ 1950 „ „ „ 0·41
„ 1951 „ „ „ 0·33

The great increase in the mortality from cancer of the lung is almost entirely due to the much heavier incidence of the disease among males.

In 1951 deaths from cancer of the lung constituted 2·4 per cent. of the total deaths from all causes.

A full report on the incidence of infectious disease in the city is given by Dr. Bradshaw, Deputy Medical Officer of Health. There are certain points to which he refers which are worthy of special mention. He has noted in connection with the incidence of poliomyelitis, the investigations which are being carried out by the Medical Research Council. The Department is taking part in a pilot investigation into the relation of physical stresses (exertion, operations, injections) to poliomyelitis. This investigation is designed to define the lines upon which a field investigation might profitably be undertaken. The problem of the control of poliomyelitis is very complex and in such cases as this advance is often made by carefully planned investigation of a limited part of the problem.

Dr. Bradshaw has also taken part in a joint investigation with the Department of Preventive Medicine and the Department of Bacteriology of the University of Leeds, into the diphtheria carrier rate in the city. This is designed to test what effect immunisation has on the carrier rate. A preliminary investigation has already been made and an account will be published in due course. The investigation will be continued over a considerable period. The Health Department is particularly fortunately situated in thus being able to collaborate with Leeds University Departments in special investigations of this kind. The investigation into the potency of whooping cough vaccines in conjunction with the Medical Research Council has continued throughout the year and has been most fruitful. A full report appeared in the British Medical Journal for June 30th, 1951, setting out in detail the results to date. The investigation has shown that whooping cough vaccines vary greatly in protective power but one was outstanding in its results. Further trials are being conducted with this type and it is hoped that before long whooping cough immunisation can be introduced on a big scale. B.C.G. Vaccination against tuberculosis is now being offered to suitable contacts. Leeds along with other large authorities is co-operating with the Medical Research Council in a large scale trial designed to protect susceptible young adults against infection. The work is being undertaken through the School Health Department but the results will be assessed long after the children have left school. Those taking part are boys and girls in their last year at school. The response by the parents to this trial has been excellent and the school authorities are to be congratulated on this. It is an index of the very good relationship between the head teachers and staffs of the schools concerned and the parents of the children.

**Maternity
and Child
Welfare**

The Liaison Committee of the Local Health Authorities in the region and the Regional Board have accepted in principle a recommendation that clinical attachés should be appointed to vacancies in the Pædiatric Services from Local Authority Medical Officers. Two medical officers had already been undertaking duties in hospitals although not under the official designation of Clinical Attaché. During the year a pædiatric registrar from the University Department of Pædiatrics commenced sessional duty at one of the Committee's clinics. The Health Committee has kept constantly in mind the necessity of providing clinic accommodation in new residential estates as well as the replacement of existing temporary premises, some of which are unsatisfactory. There are, however, many difficulties in the way of the erection of new

buildings and the acquisition of suitable old buildings which can be adapted for the purpose. The committee continued negotiations with the Ministry of Health in connection with new clinics at Belle Isle and Jack Lane but unfortunately little progress was made during the year. Applications were made during the course of the year by Tenants Associations of two areas in the city for clinic facilities to be provided. Premises were acquired adjoining the new Moortown Estate for clinic purposes. These premises which were referred to in last year's report had been acquired by the Housing Committee who at a later date offered them to the Health Committee, which offer was accepted.

The Survey of the Growth of Children undertaken on behalf of the Ministry of Health continued successfully throughout the year and is still proceeding.

During 1951 five private nursing homes were closed and the registrations were cancelled at the owners request.

The following students were in training during 1951 for the **Day Nurseries Certificate of the Nursery Nurses Examination Board** :—

Nursery Helpers	28
1st year students	52
2nd year students	24

Ten third year students passed the examination and one failed : 21 nursery helpers became students. Thirteen students and seven helpers resigned.

The Harehills and Hunslet Lane Day Nurseries were approved for training purposes. A scheme for the X-ray examination of all day nursery staff commenced during the year in accordance with a Ministry of Health recommendation. The necessary X-ray examinations are carried out on behalf of the Local Authority by the Mass Radiography Service of the Regional Board.

An account of the arrangements between the Leeds Maternity Hospital and the Health Department for the nursing of premature babies in Leeds was published in the "British Medical Journal" on June 2nd, 1951. The following account of the arrangements is extracted from that Journal :—

"The Hospital informs the Health Department concerning babies who are due for early discharge and who are considered to need continuing nursing supervision. This advance information is telephoned by the Resident Paediatric Registrar to the Supervisor

**Care of
Premature
Babies.**

of Midwives. Selection of infants for special follow-up nursing care is made by the visiting paediatrician to the hospital. On receipt of a telephone request from the Registrar, the Supervisor of Midwives arranges for the baby to be visited and supervised by one of the special premature baby nurses.

When informed of a new case the follow-up nurse visits the hospital. There she is introduced to the mother of the baby by the lying-in ward sister and has explained to her by the Pædiatric Registrar and ward sister, the clinical or other circumstances which necessitate the special follow-up."

Similar arrangements are in operation for premature babies born at home. The family doctor is kept informed of the arrangements made and his co-operation sought in each case.

Midwives

The co-ordination scheme which has been in operation since 1949 between midwives, general practitioners and ante-natal clinics worked with reasonable smoothness during the year. The scheme is based upon the following conditions which have been agreed between the Local Medical Committee and the midwives. Administrative arrangements have been made to ensure that :—

- (a) *the midwife shall inform the patient's doctor immediately she is booked for the confinement ;*
- (b) *the doctor in similar circumstances shall inform the midwife ;*
- (c) *the midwife will carry out the routine ante-natal examinations in accordance with the rules of the Central Midwives Board in addition to those carried out by the doctor. The doctor informs the midwife whether he wishes to deliver the patient personally.*

In every case collaboration between midwife and doctor on an agreed basis is arranged.

- (d) *the midwife and doctor will keep each other informed of all abnormalities.*
- (e) *similar information is transmitted between clinic doctors, general practitioner and midwife ;*
- (f) *ante-natal clinics will arrange for tests such as the Rhesus Factor, Kahn and Blood Grouping to be done on all patients and for the information to be sent to the general practitioner concerned.*

All women confined at home were offered analgesia and 87·5 per cent. accepted. All midwives are trained in the administration of analgesia.

A short account by the Superintendent Health Visitor reveals the ^{Health Visiting} wide nature and scope of the work carried out by health visitors during the year. The health visitors carry out a great deal of investigation into family circumstances for special reasons. They are working in an increasing degree in conjunction with hospital almoners in the special follow-up of patients both in hospital and after discharge.

One of the developments hoped for in the future is a closer collaboration between the general practitioner and the health visitor. With the development of group practice it may be possible to start an experiment in one or two areas whereby health visitors can be allocated to certain defined areas served by a group of doctors. One of the difficulties in the way at present of a general application of such a scheme is the shortage of health visitors. During the year a small but interesting experiment was commenced by the secondment of two health visitors for special work with the Disablement Resettlement Officers of the Ministry of Labour. The arrangement is tentative and is being watched with interest.

The high demand for home helps continued throughout the year the ^{Home Help} number of applications being at all times in excess of the ability of the Department to meet. In view of this it has been necessary to bear always in mind the emergency nature of the home help service. Many of the applicants for home help services such as the aged and chronic sick need help for long periods. To try to meet this kind of demand with a limited number of home helps would quickly result in the service becoming static and therefore a time limit has had to be imposed arbitrarily on each case. On the other hand, such help as the Department has been able to give has to some extent served the purpose of keeping at home persons who would otherwise have been compelled to go into a hostel or hospital geriatric bed. The domiciliary care of the aged alone would be sufficient to absorb the whole of the home help service were they to be used only for this purpose. The problem of the most economical Deployment of the home helps between the categories of persons requiring them—e.g. the domiciliary confinements, aged persons, chronic and incurable sick—is one which has required much care and consideration and not a little tact and wisdom by the Home Help Organiser.

During the year ten home helps attended a course in Leeds organised by the National Institute of Houseworkers. Lectures and practical work were arranged and wide range of subjects covered.

Welfare Foods.

During 1951 the Ministry of Food undertook a National Consumer survey of the uptake of vitamin foods and preparations provided under the Welfare Foods Service. The survey revealed among other things that these foods are not being used by those mothers and children entitled to them to the extent they should be. Only 60 per cent. of those entitled to them actually availed themselves of the Service. In addition there was a marked falling off in the take-up of welfare foods after the first year of the baby's life. In the case of cod liver oil only about half the number of children were still receiving it in their fifth year. About 63 per cent. of families obtained their welfare foods from the Food Office and approximately 25 per cent. from the Child Welfare Clinics. It is clear that doctors and nurses need to continue their efforts to draw the attention of mothers to the value of these protective foods.

Convalescence

The demand for rest convalescence continued high throughout the year. Early in 1951 the Health Committee approached the Ministry of Health with a proposal to purchase premises at Southport for use as a rest convalescent home for mothers and young children. Approval having been obtained, the premises were purchased and by the end of the year arrangements were far advanced and an opening of the home anticipated early in 1952. The new home will accommodate an average of thirteen mothers and babies.

Mental Health

Plans were approved by the Ministry of Health for the adaptation of Rutland Lodge (Factory-in-the-Field) for use as an Industrial and Occupation Centre for mental defectives. Arrangements for the change over were in an advanced stage by the end of the year and it is intended that they will be completed by the beginning of 1952. The new centre will replace the North Leeds Centre. The Ministry of Health also approved the erection and establishment of a new occupation centre at Stanningley to replace the West Leeds Occupation Centre which works under difficult and overcrowded conditions.

**Section 47
National Assistance
Act 1948—
Persons in need
of care and attention**

On 1st September, 1951, there came into force the National Assistance Amendment Act, 1951, which had the effect of expediting the arrangements for the removal to hospital or other institution of certain persons in need of care and attention. Under this amendment, where the Medical Officer of Health and another registered medical practitioner certify that, in the case of a person to whom Section 47 of the National

Assistance Act, 1948, applies, it is necessary that he should be removed without delay from the premises in which he is residing, an application for a removal order may be made to a Court of Summary Jurisdiction or to a Magistrate without the seven days notice required to be given to the person to be removed under the 1948 Act.

The Medical Officer of Health has been authorised by the Health Committee to make such an application. The Order may be made provided that the hospital or institution agrees to accommodate the person.

The persons to whom this applies are those who :—

- (a) *are suffering from grave chronic disease, or being aged, infirm or physically incapacitated, are living in insanitary conditions and ;*
- (b) *are unable to devote to themselves and are not receiving from other persons proper care and attention.*

Close collaboration is necessary and exists between the Health and Welfare Services Departments, the Regional Board and Management Committees in respect of the action to be taken with regard to the persons described above.

Heavy demands on the service continued throughout the year. Ambulance Service There was a slowing down of the rate of increase as far as the use of ambulances was concerned but this was not evident in the sitting case car service. Very heavy demands continued to be made in respect of hospital out-patient departments especially such departments as physiotherapy. As mentioned in last years' report plans were in hand for the erection of a new ambulance station at Saxton Lane. Owing to difficulties in the supply of materials there has been considerable delay and at the time of writing this report there has been no further progress. With the installation of radiotelephony and the consequent installation of the operator in an already crowded duty and operations room, difficulties are being encountered. This together with increasing garaging difficulties make a new station increasingly imperative apart from other considerations which affect the City Transport Department.

By the end of the year the vehicle replacement programme for the ambulance service, decided upon by the Health Committee in 1949 was approaching completion and by 1952 the ambulance and car fleet should be in good condition. The small six seater sitting case brake has proved to be a good practical and economical type of vehicle for city work,

proving a saving in petrol and maintenance as well as having the advantage of greater mobility and ease of handling over larger vehicles of the bus type.

Housing

During 1951, 256 houses were formally represented as unfit for human habitation, 226 as individual unfit houses under Section 11 and 30 as clearance areas under Section 25, Housing Act, 1936.

The extent of gross disrepair of houses in the city is very serious. All that can be done under the Public Health Act, 1936, and under Section 9, Housing Act, 1936, is being done to keep these houses as far as possible at least weatherproof.

During the year 378 new applications were made to the Housing Department for rehousing on grounds of medical priority.

Recommendations were made as follows :—

A. Certificate .. recommended for immediate rehousing on medical grounds	51
B. Certificate .. rehousing to follow housing action under Sec. 11 or Sec. 25	83
C. Certificate .. immediate rehousing not recommended on medical grounds	244

In addition to the new applications there were 66 cases referred for a review of the medical circumstances. Of these ten were recommended for rehousing and in 56 cases no alteration in medical priority was recommended.

It will be noted from the figures mentioned above that in spite of 378 applications on medical grounds having been received only 51 were recommended for immediate rehousing. This will appear to be a small proportion but it will be appreciated that the only criterion which can be used for rehousing sick persons in time of scarcity of houses is a belief that a new house will materially benefit the medical condition from which the applicant is suffering. It may be said with justification that good housing benefits everybody but this, of course, applies to the fit as well as to the sick. When houses are scarce, therefore, the claims of the healthy families must receive due weight and houses cannot be spared even where there is sickness unless there is a reasonable chance that the sickness or disability will be improved by rehousing.

During the year 136 tuberculous persons were recommended for rehousing by the Chest Physician. These were classified as follows :—

26 recommended for imperative and immediate housing.

87 recommended as very urgent.

23 recommended as urgent.

During the year the Housing Committee rehoused 107 tuberculous persons. This represents a very generous proportion of housing having regard to the strained resources of the Committee. There remains unfortunately a waiting list of tuberculous persons whose condition would be benefited by rehousing.

No one who has any experience of tuberculosis work, or any experience of housing, would deny the desirability of providing a separate house for every tuberculous family. The advantages are obvious, not only to the individual tuberculous patient, but to his immediate family and to the community in general. The housing shortage today is such that there are many rival claimants for rehousing in the field.

The case for rehousing tuberculous families must be weighed against the undoubted claims of other forms of sickness and those of inadequately housed families and special priority for the tuberculous can only be justified if it can be clearly shown that over and above the urgent necessity for providing houses for healthy families in overcrowded conditions or living in defective houses, there is still the necessity for tuberculous families to be rehoused on a high priority basis, and it should not be regarded as necessarily taking an unsympathetic view if the case for the tuberculous family must be critically examined, and its claim to priority explicitly stated.

It is not purely a question of merely providing a tuberculous family with a separate house. There must be adequate segregation of the infectious tuberculous patient within the house. Very little is gained by putting a family in which there is an open case of tuberculosis in a new house, if, in fact, the patient continues to live in—what are for him—overcrowded conditions, and unless the tuberculous patient is really and physically separated from his family by being provided with his own room and being prepared to use it, then very little is gained, and, indeed, something is lost, as that house could have rehoused a fit family.

One of the most important conditions to be fulfilled in the case of rehoused tuberculous families is that of continued supervision by the health visiting staff of the clinic. It is essential that where a family has been adequately rehoused, they should not be allowed to overcrowd that house by taking in other members of the family or subletting part of the house to another family. This is a gross misuse of their special priority and the strongest possible measures should be taken against it.

Tuberculosis is not a label by which a family should gain an advantage over other families whose need may be just as great.

Food Hygiene

The codes of practice agreed by the Health Committee in 1950 were in operation in relation to the handling, wrapping, delivery and sale of food in the open air and in relation to ice cream, meat and fish and for canteens, restaurants and cafe kitchens. They have proved of the greatest assistance in setting reasonable standards for the food handlers of the city. It should again be emphasised that they represent a standard to which the Health Committee expect food traders to conform since they are drawn up in conformity with modern standards of food hygiene. It can be said with justification that the great majority of food traders have co-operated and have shown themselves to be anxious to provide adequate safeguards. There is, however, a small minority whose ideas of the hygienic preparation of food products leave much to be desired. But it is not only the food manufacturer or seller who has to be considered. While the trader or manufacturer is held responsible for the cleanliness and purity of the products he sells it must not be forgotten that his employees have responsibilities as well. There is evidence that some employees do not realise this. It should be remembered that there is a legal duty on all persons employed in handling food to observe cleanliness. The byelaws of the City of Leeds made in 1950 under the Food and Drugs Act, 1938, make this clear.

Byelaw No. 2 states that :—“ Every person who handles, wraps or delivers any food shall observe cleanliness both in regard to himself and his clothing.”

Byelaw No. 4 states, among other things :—that “ Every person who handles, wraps, delivers any food shall take all such steps as may be reasonably necessary to protect the food from dust, dirt, mud, filth, dirty water, animals, rodents, flies, insects, and other sources of contamination.”

It is clear that these conditions apply to employees as well as to employers. The presence of a cigarette end, for example, in an article of food raises suspicion that the fault may be with the employee and not with the employer.

In carrying out the work of the Department it is necessary to work in day-to-day collaboration with the officers of many other Authorities and Government Departments. Chief among these are the Senior Administrative Medical Officer and the Secretary of the Regional Board, the Clerk of the Executive Council, the Chairman of the Local Medical Committee, the local officers of the Ministry of National Insurance, the regional officers of the Ministry of Labour, the Factory Inspector and the local officers of the Assistance Board. From all these the department has received unfailing courtesy and help and our grateful thanks are due to them.

Similarly the thanks of the Department are due to our colleagues in the other Departments of the Council.

To my own colleagues in the Health Department I tender my personal thanks. It would be invidious to name any of them, suffice it to say that they are an excellent team and each takes a pride in his or her work which makes working with them a pleasure. All have taken their full share in this report as their individual contributions show.

Finally I give my personal thanks and those of my Department to the Chairman, Deputy Chairman and members of the Health Committee for their courtesy and consideration to me and the members of my staff during the year.

I am,

Ladies and Gentlemen,

Your obedient servant,

I. G. DAVIES.

*Public Health Department,
Leeds, 1.*

July, 1952.

SUMMARY

1951

LATITUDE $53^{\circ} 48'$ North. LONGITUDE $1^{\circ} 32'$ West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY	38,296·5 Acres.
HOME POPULATION (Registrar General's Estimate) ..	503,030
ESTIMATED NUMBER OF HOUSES	157,466
RATEABLE VALUE	£3,961,892
SUM REPRESENTED BY A PENNY RATE	£15,745
	Average
	1951. 1941-50,
BIRTH RATE (births per 1,000 living)	16·0 17·6
MARRIAGE RATE (persons married per 1,000 living) ..	18·0 19·4
DEATH RATE (deaths per 1,000 living)	13·5 13·3
NATURAL INCREASE OF POPULATION	1,247 2,080
(Excess of births over deaths in the year)	
INFANT MORTALITY RATE	31 45
(Deaths under 1 year per 1,000 births)	
DEATH RATE from Pneumonia and Bronchitis	2·06 1·34
" " Cancer	2·00 1·98
" " Diarrhoea and Enteritis (under 2 years) per 1,000 births	0·87 6·39
	Case- rate
	Deaths
SCARLET FEVER	524 1·04
DIPHTHERIA	2 0·004
TYPHOID FEVER .. .. .. ..	.. .. .. ..
MEASLES	7,669 15·25 3 0·01
WHOOPING COUGH	1,625 3·23 4 0·01
PULMONARY TUBERCULOSIS	476 0·95 166 0·33
OTHER FORMS OF TUBERCULOSIS	104 0·21 16 0·03

Natural and Social Conditions.

NATURAL AND SOCIAL CONDITIONS.

Area.—The area of the city is 38,296·5 acres.

Population.—The Registrar General's estimate of the home population of the city at the mid year of 1951 was 503,030.

Census, 1951.—During the year another census—the fifteenth in the series commencing in 1801—was taken and the preliminary report of the Registrar General gives the population of Leeds as 504,954, namely 237,014 males and 267,940 females. This means that in the last twenty years, 1931-1951, the population of the city has increased by 22,145 or 4·59 per cent. as compared with the figure at the 1931 census (482,809).

Dwelling-houses.—The total number of occupied dwelling-houses in the city at December, 1951, was 157,466.

Rateable Value.—The rateable value of the city in 1951 was £3,961,892 and the sum represented by a penny rate was £15,745. The corresponding figures for 1950 were £3,922,352 and £15,573.

Meteorological Conditions.—The hours of bright sunshine registered during the year were 1,107·00, the sunniest month being June with a daily average of 5·83 hours and the darkest December with a daily average of 0·26 hours. The daily average for the whole year was 3·03 hours.

The total rainfall for the year was 33·80 inches, the driest month being June with a total of 0·78 inches and the wettest November with 6·33 inches. Taking the four quarters of the year, the rainfall in the first quarter was 7·80 inches; in the second 6·31; in the third 9·84; and in the fourth 9·85 inches.

The month with the highest average temperature was July with 63·80 degrees and the lowest January with 40·11 degrees. The average temperature for the whole year was 50·86 degrees.

VITAL AND MORTAL STATISTICS.

MARRIAGES.

The number of marriages which took place in Leeds during the year was 4,531 corresponding to a marriage rate of 18·0 as compared with 4,495 and a rate of 17·6 for the previous year and an average of 4,903 and 19·7 for the previous five years.

The provisional marriage rate for England and Wales for 1951 was 16·4 as compared with 16·3 for the previous year.

BIRTHS.

The births registered in the city during 1951 numbered 8,700, comprising 4,530 males and 4,170 females. Of these 386 males and 366 females born to parents not residing in Leeds were transferred out, whilst 49 males and 47 females born outside the city to Leeds parents were transferred in, making a nett total of 8,044 births, comprising 4,193 males and 3,851 females.

The birth-rate was 16.0 per 1,000 of the home population, as compared with 15.9 for the previous year and an average of 18.7 for the previous five years.

The birth-rate for the city was lower than the rate for the 126 large towns which was 17.3 per 1,000 of the home population and higher than that of England and Wales taken as a whole which was 15.5 per 1,000 of the home population.

Excess of Births over Deaths.—The excess of births over deaths or the "natural increase of population" was 1,247 as compared with 1,859 for the previous year and an average of 2,080 for the previous ten years.

Illegitimate Births.—Of the 8,044 (nett) births registered, 7,532 (3,924 males and 3,608 females) or 93.6 per cent. were legitimate and 512 (269 males and 243 females) or 6.4 per cent. were illegitimate. The comparative figures for the previous year were 7,567 or 93.3 per cent. legitimate and 546 or 6.7 per cent. illegitimate.

ILLEGITIMATE BIRTHS.

Year.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1937 ..	400	5.5%	0.81
1938 ..	429	5.6%	0.87
1939 ..	387	5.5%	0.78
1940 ..	402	5.8%	0.86
1941 ..	443	6.6%	0.94
1942 ..	460	6.4%	0.99
1943 ..	583	7.7%	1.28
1944 ..	683	8.0%	1.51
1945 ..	841	10.8%	1.86
1946 ..	764	7.7%	1.54
1947 ..	699	6.4%	1.42
1948 ..	595	6.4%	1.19
1949 ..	554	6.4%	1.08
1950 ..	546	6.7%	1.07
1951 ..	512	6.4%	1.02

Stillbirths.—The number of stillbirths registered during the year was 191, comprising 103 males and 88 females. The inward transfers numbered 3, namely 1 male and 2 females, which after adjustment leaves a nett total of 194, made up of 104 males and 90 females. The rate per thousand of the population was 0·39 as compared with 0·37 for the previous year. The rate for England and Wales was 0·36. Expressed as a percentage of the total births the rate was 2·4 as compared with 2·3 for 1950.

Year.	No. of stillbirths registered.*	Per cent. of total births.	Rate per 1,000 population.
1938 ...	329 (19)	4·1	0·67
1939 ...	307 (19)	4·2	0·62
1940 ...	282 (27)	3·9	0·61
1941 ...	259 (29)	3·9	0·55
1942 ...	278 (32)	3·7	0·60
1943 ...	250 (22)	3·2	0·55
1944 ...	262 (23)	3·0	0·58
1945 ...	248 (38)	3·1	0·55
1946 ...	299 (29)	2·9	0·62
1947 ...	306 (26)	2·7	0·62
1948 ...	219 (26)	2·3	0·44
1949 ...	200 (23)	2·3	0·40
1950 ...	189 (16)	2·3	0·37
1951 ...	194 (20)	2·4	0·39

* Illegitimate Stillbirths in brackets.

DEATHS.

The gross number of deaths registered in the city during the year was 6,983, comprising 3,637 males and 3,346 females, giving a gross death-rate of 13·9 as compared with 12·6 for the previous year. The inward transferable deaths numbered 409, namely 206 males and 203 females and outward transfers 595, namely 322 males and 273 females, which after adjustment, leaves a nett total of 6,797 deaths debitale to the city, made up of 3,521 males and 3,276 females. The corresponding death-rate was 13·5 as compared with 12·3 for the previous year and an average of 12·9 for the previous five years.

The death-rate for England and Wales was 12·5 and that for the 126 large towns 13·4.

The higher mortality in 1951 may be attributed in part to the influenza epidemic in the early months of the year. Although the number of deaths assigned to influenza was not so great as in other parts of the country there were many more deaths than usual from bronchitis and pneumonia amongst elderly people.

Causes of Death.—The principal causes of death were, in order of numerical importance, heart disease (Nos. 410-443), vascular lesions of central nervous system (Nos. 330-334), malignant neoplasms (Nos. 140-199), bronchitis (Nos. 500-502), pneumonia (Nos. 490-493) and other circulatory diseases (Nos. 444-468) which together accounted for 5,256 or 77·3 per cent. of the total deaths. Last year this group of diseases was responsible for 4,823 or 77·1 per cent. of the total deaths.

The tables on pages 8 and 9 set out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

Deaths in Age Groups.—The table on page 10 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 0-1, 1-2 and 2-5 was 291 or 4·3 per cent. of the total deaths, as compared with 285 or 4·6 per cent. for the previous year and an average of 416 or 6·5 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 714 or 10·5 per cent. as compared with 733 or 11·7 per cent. in the previous year. In the remaining age groups 45-65 and 65+ the deaths numbered 6,083 or 89·5 per cent. as compared with 5,521 or 88·2 per cent. for the previous year.

Cremations.—Out of a total of 6,797 Leeds deaths during the year, the number of bodies disposed of by cremation was 2,205 or 32·4 per cent. as compared with 1,790 or 28·6 per cent. for the previous year. Of this number 1,655 were cremated at Lawnswood and the remainder, 550, at Cottingley Hall. The total number of cremations represents an increase of 415 on the figure for the previous year and an increase of 811 on the average number of cremations for the previous five years.

INFANT MORTALITY.

The number of children under one year of age who died in 1951 was 247 (males 150, females 97) as compared with 250 (males 135, females 115) in 1950. The infant mortality rate was 31 as compared with 31 for the previous year and an average of 38 for the previous five years.

The rate for England and Wales was 30 or 3·3 per cent. lower than the rate for Leeds, whilst the rate for the 126 large towns was 34 or 9·7 per cent. higher.

Illegitimate Death-Rate.—Of the 512 illegitimate births, 22 or 4·3 per cent. died before reaching the age of one year, which is equal to an infant mortality rate of 43, as compared with 27 in 1950.

Causes of Death.—The principal causes of death of infants under one year of age during the year, in order of numerical importance were pneumonia 58 (23·5 per cent.), prematurity 42 (17·0 per cent.), post-natal asphyxia 38 (15·4 per cent.), and congenital malformations 24 (9·7 per cent.). The respiratory group of diseases was responsible for 69 or 27·9 per cent. of the total deaths under one year of age. In 1950 the number was 70 or 28·0 per cent. and the average for the previous five years 82 or 23·6 per cent. For further details of causes of death of infants under one year, see tables on pages 11 and 12.

Prematurity.—The number of deaths from prematurity (unqualified) was 40 and a further 2 deaths were classified as prematurity with a subsidiary condition, e.g. bronchitis, making a total of 42 deaths from all types of prematurity. The death-rate from prematurity per thousand live births was 5·2 as compared with 5·2 for the previous year.

The following table shows the number of deaths classified to other diseases of early infancy in which prematurity was mentioned as a contributory cause of death.

INFANT DEATHS WITH MENTION OF PREMATURITY

International List Nos.	Cause of death	Deaths	
		M.	F.
760·5	Intra-cranial and spinal injury at birth ..	6	..
762·5	Post-natal asphyxia and atelectasis ..	16	9
763·5	Pneumonia of newborn	1	1
770·5	Erythroblastosis	1	..
773·5	Ill-defined diseases peculiar to early infancy	1	1

Deaths in Age Groups.—Of the total (247) infant deaths, 60 or 24.3 per cent. took place on the first day; 125 or 50.6 per cent. in the first week; 141 or 57.1 per cent. in the first month; 36 or 14.6 per cent. between one and three months; 40 or 16.2 per cent. between three and six months; 19 or 7.7 per cent. between six and nine months and 11 or 4.5 per cent. between nine and twelve months.

The percentage changes in the infant death-rates per thousand births in 1951 as compared with the previous ten years are as follows :—

Under 1 week decrease	10.9%	3-6 months decrease	13.1%
Under 1 month	26.8%	6-9	36.8%
1-3 months	46.4%	9-12	39.1%
Whole year decrease, 31.5%			

Neo-Natal Death-Rate.—The number of deaths of infants occurring in the first month of life was 141 or 7 fewer than in the previous year, the corresponding neo-natal death-rate being 17.5 as compared with 18.2 in 1950.

Of the total deaths under one year of age 57.1 per cent. occurred in the first month, and of deaths in the first month 42.6 per cent. occurred on the first day, 88.7 per cent. in the first week and 95.0 per cent. in the first two weeks.

As in previous years, deaths in the first month were largely due to prematurity, atelectasis and post-natal asphyxia.

MATERNAL MORTALITY.

The number of mothers who lost their lives in childbirth during the year was 5, the same as the figure for the previous year. The corresponding maternal mortality rate per thousand live births was 0.62 as compared with 0.62 for the previous year and an average of 0.79 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0.61 as compared with 0.60 for the previous year.

The causes of death were as follows :—

- (1) Rupture of a tubal ectopic pregnancy.
- (2) (a) Eclampsia b. Pre-Eclampsia c. Pregnancy (undelivered).
- (3) Septicæmia following a septic abortion self induced.
- (4) Rupture of uterus. Recent delivery of a stillborn child.
- (5) Hæmorrhage following a ruptured uterus. Toxæmia of pregnancy.

PRINCIPAL CAUSES OF DEATH.

International List Nos.	Diseases	No. of deaths in 1951 (nett)	No. of deaths in 1950 (nett)	Death rate 1951
001-008	Tuberculosis, respiratory	166	178	0.33
010-019	Tuherculosis, other forms	16	15	0.03
020-029	Syphilitic disease	22	31	0.04
055	Diphtheria .. . . . .	..	1	..
056	Whooping Cough	4	6	0.01
057	Meningococcal infections	5	2	0.01
080	Acute poliomyelitis .. . . . .	..	9	..
085	Measles	3	2	0.01
Remainder of 001-138	Other infective and parasitic diseases	5	7	0.01
151	Malignant neoplasms: Stomach	188	173	0.37
162, 163	Lung, bronchus	168	208	0.33
170	Breast	102	93	0.20
171-174	Uterus	40	70	0.08
Remainder of 140-203, 205, 204	Other malignant and lymphatic neoplasms	506	502	1.01
260	Leukaemia, aleukaemia	17	16	0.03
330-334	Diahetes	31	43	0.06
420	Vascular lesions of central nervous system	1,012	932	2.01
440-443 Remainder of 410-443	Coronary disease, angina	807	771	1.60
444-468	Hypertension with heart disease	183	161	0.36
480-483	Other heart disease	1,004	1,011	2.00
490-493	Other circulatory disease	221	225	0.44
500-502 470-475 510-527	Influenza	146	21	0.29
540, 541 543, 571 572, 764	Pneumonia (4 weeks +)	394	255	0.78
590-594	Pneumonia (4 weeks +)	631	422	1.25
610	Bronchitis	88	53	0.17
640-689	Other diseases of the respiratory system	69	55	0.14
750-759	Ulcer of stomach and duodenum	20	25	0.04
Residual	Gastritis, enteritis and diarrhoea	72	81	0.14
E810-E835 E800-E802 E840-E962	Nephritis and nephrosis	39	44	0.08
E963 E970-E979	Hyperplasia of prostate	5	5	0.01
E964-E965 E980-E999	Pregnancy, childbirth and abortion	33	54	0.07
	Congenital malformations	506	529	1.01
	Other defined and ill-defined diseases	51	54	0.10
	Motor vehicle accidents	150	138	0.30
	All other accidents	64	51	0.13
	Suicide	29	11	0.06
	Homicide and operations of war	6,797	6,254	13.51
	Totals			

CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR, 1951.

International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.										*Total Hospital Deaths in the District
		All Ages	Under 1 year.	1 & under 2 years.	2 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 & under 75 years.	75 and upwards.	
001-008	Tuberculosis, respiratory ..	166	1	..	1	2	6	53	68	28	7	64
010-019	Tuberculosis, other forms ..	16	1	4	2	1	2	2	3	..	1	22
020-029	Syphilitic disease ..	22	..	..	..	..	..	2	11	6	3	5
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	4	2	2	..	..	..	..	..	..	..	5
057	Meningococcal infections ..	5	1	2	1	..	..	1	..	..	..	5
080	Acute poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	1
085	Measles ..	..	3	2	..	1	..	..	..	..	..	2
Remainder of 001-138	Other infective and parasitic diseases ..	5	1	..	..	..	1	1	..	1	1	7
	Malignant neoplasms :											
151	Stomach ..	188	..	..	..	..	6	59	81	42	61	
162, 163	Lung, bronchus ..	168	..	..	..	..	..	12	96	44	16	76
170	Breast ..	102	..	..	..	..	..	15	61	9	17	33
171-174	Uterus ..	40	..	..	..	..	..	3	24	6	7	17
Remainder of 140-203,	Other malignant and lymphatic neoplasms ..	506	1	1	..	6	3	21	186	182	106	273
205												
204	Leukaemia, aleukaemia ..	17	..	..	1	2	..	3	7	2	2	19
260	Diabetes ..	31	..	1	..	..	..	..	4	16	10	20
330-334	Vascular lesions of central nervous system ..	1,012	..	..	..	..	1	12	165	314	520	447
420	Coronary disease, angina ..	807	..	..	..	..	1	21	259	322	204	208
440-443	Hypertension with heart disease ..	..	..	..	..	..	..	2	51	71	59	66
Remainder of 410-443	Other heart disease ..	1,004	..	..	..	1	4	33	145	256	565	158
444-448	Other circulatory disease ..	221	..	..	..	1	1	2	33	63	121	101
480-483	Influenza ..	146	2	..	..	..	2	5	34	43	60	15
490-493	Pneumonia (4 weeks +) ..	394	45	3	5	..	1	14	81	99	146	235
500-502	Bronchitis ..	631	4	1	..	..	..	11	176	217	222	185
470-475	Other diseases of the respiratory system ..	..	..	..	..	..	..	8	31	26	19	56
510-527		88	3	1	..	..	..	..	..
540, 541	Ulcer of stomach and duodenum ..	69	..	..	..	..	..	8	32	15	14	72
543,571	Gastritis, enteritis and diarrhoea ..	..	..	..	..	..	..	..	3	4	5	18
572,764	Nephritis and nephrosis ..	20	7	..	1	..	..	..	..	..
590-594	..	..	..	..	..	2	1	12	21	21	15	37
610	Hyperplasia of prostate ..	39	..	..	..	..	..	..	3	13	23	28
640-689	Pregnancy, childbirth and abortion ..	..	..	..	..	..	2	3	..	..	..	8
750-759	Congenital malformations ..	5	..	..	..	..	..	..	..	..	..	..
Residual	Other defined and ill-defined diseases ..	33	24	..	2	2	1	3	1	..	..	41
E810-E835	Motor vehicle accidents ..	506	137	3	5	8	6	33	121	81	112	435
E800-E802		51	..	1	2	7	9	10	11	6	5	32
E840-E962	All other accidents ..	..	..	..	..	..	..	..	..
E963,		150	16	1	3	9	6	13	30	23	49	103
E970-E979	..	..	..	..	..	..	..	..
E964,E965	Suicide ..	64	..	..	..	..	2	16	27	12	7	11
E980-E999	Homicide and operations of War ..	29	..	..	1	2	3	2	15	6	..	13
	Totals	6,797	247	20	24	44	52	327	1,758	1,967	2,358	2,879

*Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District.

DEATHS IN AGE GROUPS (NETT), 1941-1951.

Together with the percentage of the total deaths, represented by each group
(in italics).

Year.	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
1941	407 <i>6·3%</i>	62 <i>1·0%</i>	79 <i>1·2%</i>	92 <i>1·4%</i>	151 <i>2·3%</i>	599 <i>9·3%</i>	1,834 <i>28·4%</i>	3,232 <i>50·1%</i>	6,456
1942	369 <i>6·1%</i>	45 <i>0·7%</i>	59 <i>1·0%</i>	86 <i>1·4%</i>	118 <i>1·9%</i>	531 <i>8·7%</i>	1,703 <i>28·0%</i>	3,179 <i>52·2%</i>	6,090
1943	356 <i>5·6%</i>	42 <i>0·7%</i>	63 <i>1·0%</i>	96 <i>1·5%</i>	144 <i>2·3%</i>	563 <i>8·8%</i>	1,657 <i>26·1%</i>	3,437 <i>54·0%</i>	6,358
1944	429 <i>7·0%</i>	34 <i>0·6%</i>	37 <i>0·6%</i>	86 <i>1·4%</i>	114 <i>1·9%</i>	500 <i>8·2%</i>	1,663 <i>27·1%</i>	3,261 <i>53·2%</i>	6,124
1945	438 <i>6·8%</i>	33 <i>0·5%</i>	37 <i>0·6%</i>	67 <i>1·1%</i>	104 <i>1·6%</i>	481 <i>7·5%</i>	1,752 <i>27·3%</i>	3,498 <i>54·6%</i>	6,410
1946	401 <i>6·1%</i>	29 <i>0·4%</i>	30 <i>0·5%</i>	49 <i>0·7%</i>	99 <i>1·5%</i>	458 <i>6·9%</i>	1,775 <i>26·8%</i>	3,773 <i>57·0%</i>	6,614
1947	552 <i>8·1%</i>	33 <i>0·5%</i>	59 <i>0·9%</i>	51 <i>0·8%</i>	85 <i>1·3%</i>	490 <i>7·2%</i>	1,677 <i>24·7%</i>	3,846 <i>56·6%</i>	6,793
1948	321 <i>5·4%</i>	34 <i>0·6%</i>	25 <i>0·4%</i>	43 <i>0·7%</i>	78 <i>1·3%</i>	401 <i>6·8%</i>	1,599 <i>27·1%</i>	3,401 <i>57·6%</i>	5,902
1949	254 <i>3·9%</i>	27 <i>0·4%</i>	30 <i>0·5%</i>	46 <i>0·7%</i>	87 <i>1·3%</i>	413 <i>6·4%</i>	1,704 <i>26·4%</i>	3,890 <i>60·3%</i>	6,451
1950	250 <i>4·0%</i>	9 <i>0·1%</i>	26 <i>0·4%</i>	42 <i>0·7%</i>	60 <i>1·0%</i>	346 <i>5·5%</i>	1,609 <i>25·7%</i>	3,912 <i>62·6%</i>	6,254
1951	247 <i>3·6%</i>	20 <i>0·3%</i>	24 <i>0·4%</i>	44 <i>0·6%</i>	52 <i>0·8%</i>	327 <i>4·8%</i>	1,758 <i>25·9%</i>	4,325 <i>63·6%</i>	6,797

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	1950	1951	% of total deaths under one
010	Tuberculosis of meninges and central nervous system ..	..	I	0·41
Rest of 001-019	Tuberculosis, other forms ..	..	I	0·41
020	Syphilis .. .. ..	..	..	..
050	Scarlet fever .. .. ..	..	..	..
055	Diphtheria .. .. ..	..	..	..
056	Whooping Cough	5	2	0·81
057	Meningococcal infections ..	..	I	0·41
085	Measles	I	2	0·81
340	Meningitis (non-meningococcal) ..	..	3	1·22
480-483	Influenza	I	2	0·81
490-493	Pneumonia (4 weeks—1 year) ..	40	45	18·22
500-502	Bronchitis	9	4	1·62
560, 561, 570	Intestinal obstruction, hernia ..	3	5	2·02
571, 572	Gastro-enteritis (4 weeks—1 year) ..	12	7	2·83
751	Spina bifida and meningocele ..	10	10	4·05
754	Congenital malformations of circulatory system	14	11	4·45
750, 752, 753, }	All other congenital malformations ..	21	3	1·22
755-759	Birth injuries	16	19	7·69
760-761	Post-natal asphyxia, atelectasis ..	30	38	15·38
762	Pneumonia of newborn (—4 weeks) ..	12	13	5·26
763	Diarrhoea of newborn (—4 weeks) ..	..	..	..
764	Other infections of newborn ..	I	..	..
765-768	Hæmolytic disease of newborn ..	5	4	1·62
770	Other diseases peculiar to early			
769,	infancy	6	3	1·22
771-773	Prematurity	42	42	17·00
774-776	Accidental mechanical suffocation ..	3	5	2·02
E924	Other violent causes	8	11	4·45
Rem. of E800-999	All other causes	11	15	6·07
Residual	Totals	250	247	..

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

INFANT MORTALITY IN WARDS AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE, CALENDAR YEAR, 1951.

WARD.	Births in year.	Under one day.		Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.		
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	
City	358	2	5.6	4	11.2	5	14.0	2	5.6	3	8.4	2	5.6	1	2.8	13	36	
Blenheim	446	6	13.5	12	26.9	12	26.9	1	2.2	6	13.5	3	6.7	2	4.5	24	54	
Westfield	439	4	9.1	9	20.5	11	25.1	4	9.1	4	9.1	..	..	1	3.1	19	43
Wellington	326	..	..	5	15.3	6	18.4	..	..	2	6.1	..	..	1	3.1	9	28
Hyde Park	260	4	15.4	5	19.2	5	19.2	..	..	2	7.7	1	3.8	..	..	8	31
Kirkstall	294	..	..	3	10.2	5	17.0	1	3.4	1	3.4	1	3.4	..	..	8	27
Far Headingley	184	1	5.4	3	16.3	3	16.3	..	..	2	10.9	..	..	..	..	5	27
Meanwood	230	5	21.7	8	34.8	8	34.8	2	8.7	..	..	..	..	..	..	10	44
Woodhouse	341	1	2.9	4	11.7	5	14.7	2	5.9	..	..	1	2.9	..	..	8	24
Moortown	266	3	11.3	5	18.8	5	18.8	1	3.8	1	3.8	..	..	..	..	7	26
Allerton	246	2	8.1	4	16.3	7	28.5	..	..	..	..	..	..	..	..	7	29
Roundhay	290	2	6.9	2	6.9	2	6.9	1	3.4	3	10.3	1	3.4	..	..	7	24
Richmond Hill	364	2	5.5	5	13.7	5	13.7	1	2.7	3	8.2	2	5.5	1	2.7	12	33	
Potternewton	332	4	12.0	5	15.1	5	15.1	1	3.0	2	6.0	..	..	..	..	8	24
Harehills	193	1	5.2	1	5.2	2	10.4	..	..	2	10.4	1	5.2	..	..	5	26
Burnmoorsofts	232	1	4.3	2	8.6	2	8.6	2	8.6	..	..	1	4.3	..	..	5	22
East Hunslet	281	..	..	4	14.2	4	14.2	3	10.7	1	3.6	1	3.6	10	36		
Osmondthorpe	342	1	2.9	3	8.8	3	8.8	2	5.8	..	..	..	..	1	2.9	6	18
Cross Gates	234	2	8.5	2	8.5	2	8.5	..	..	..	..	..	..	1	4.3	3	13
Halton	184	1	5.4	3	16.3	3	16.3	2	10.9	..	..	1	5.4	..	..	6	33
Beeston	250	3	12.0	4	16.0	4	16.0	1	4.0	1	4.0	..	..	..	..	6	24
Holbeck	320	3	9.4	7	21.9	9	28.1	1	3.1	1	3.1	..	..	..	..	12	38
Hunslet Carr	307	1	3.3	3	9.8	3	9.8	2	6.5	..	..	2	6.5	..	..	7	23
Middleton	379	4	10.6	7	18.5	7	18.5	2	5.3	5	13.2	..	..	2	5.3	16	42
Armley	229	..	..	..	..	..	..	1	4.4	..	..	1	4.4	..	..	3	13
Wortley	209	1	4.8	3	14.4	3	14.4	2	9.6	..	..	..	..	..	..	5	24
Bramley	280	4	13.3	9	30.0	9	30.0	2	6.7	1	3.3	..	..	1	4.4	12	40
Stanningley	228	2	8.8	3	13.2	5	21.9	..	..	..	..	..	..	..	..	6	26
City Totals	..	8,044	60	7.5	125	15.5	141	17.5	36	4.5	40	50	19	2.4	11	1.4	247	31

BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1951.

Ward.	Total Births (nett).	Birth rate per 1,000 population.	No. of legitimate births.	No. of illegitimate births.	Total deaths under one year (nett.).	Death rate per 1,000 births.	No. of legitimate deaths under one year.	Legitimate death rate per 1,000 legitimate births.	No. of illegitimate deaths under one year.	Illegitimate death rate per 1,000 illegitimate births.
City	358	24.1	309	49	13	36	11	36	2	41
Blenheim	..	24.6	388	58	24	54	23	59	1	17
Wellington	..	23.9	393	46	19	43	14	36	5	109
Hyde Park	..	17.8	306	20	9	28	8	26	1	50
Kirkstall	..	13.9	246	14	8	31	7	28	1	71
Far Headingley	..	15.9	273	21	8	27	8	29	..	..
Meanwood	..	13.1	179	5	5	27	5	28	..	..
Woodhouse	..	12.1	220	10	10	44	9	41	1	100
Moortown	..	15.9	319	22	8	24	6	19	2	91
Allerton	..	16.0	261	5	7	26	7	27	..	..
Roundhay	..	11.6	238	8	7	29	7	29	..	..
Richmond Hill	..	13.3	278	12	7	24	7	25	..	..
Potternewton	..	20.7	341	23	12	33	11	32	1	43
Harehills	..	20.8	288	44	8	24	7	24	1	23
Burnmantofts	..	11.3	180	13	5	26	4	22	1	77
East Hunslet	..	14.7	221	11	5	22	4	18	1	91
Osmondthorpe	..	15.0	271	10	10	36	9	33	1	100
Cross Gates	..	17.2	321	21	6	18	6	19	..	..
Halton	..	16.3	223	11	3	13	3	13	..	..
Beeston	..	12.1	178	6	6	33	6	34	..	..
Holbeck	..	11.6	239	11	6	24	6	25	..	..
Hunslet Carr	..	15.9	304	16	12	38	11	36	1	63
Middleton	..	15.5	295	12	7	23	7	24	..	..
Armley	..	20.2	361	18	16	42	14	39	2	III
Wortley	..	13.2	216	13	3	13	3	14	..	..
Bramley	..	12.2	206	3	5	24	5	24	..	..
Stanningley	..	16.4	264	16	12	40	11	42	1	63
	228	14.7	214	14	6	26	6	28	..	..
City Totals	..	8,044	16.0	7,532	512	247	31	225	30	43

INFANTILE MORTALITY DURING THE FOURTEEN YEARS 1938-1951 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

15

YEAR.	Births in year.	Under one week.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.				
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.			
1938	..	7,614	170	22.3	252	33.1	75	9.9	69	9.1	55	7.2	39	5.1	490	64
1939	..	7,079	149	21.0	214	30.2	66	9.3	50	7.1	44	6.2	27	3.8	401	57
1940	..	6,946	157	22.6	214	30.8	70	10.1	48	6.9	39	5.6	24	3.5	395	57
1941	..	6,667	123	18.4	178	26.7	69	10.3	75	11.2	41	6.1	44	6.6	407	61
1942	..	7,204	154	21.4	214	29.7	58	8.1	49	6.8	31	4.3	17	2.4	369	51
1943	..	7,547	139	18.4	179	23.7	58	7.7	62	8.2	43	5.7	14	1.9	356	47
1944	..	8,518	177	20.8	242	28.4	75	8.8	55	6.5	42	4.9	15	1.8	429	50
1945	..	7,760	151	19.5	222	28.6	93	12.0	65	8.4	34	4.4	24	3.1	438	56
1946	..	9,886	174	17.6	235	23.8	79	8.0	41	4.1	25	2.5	21	2.1	401	41
1947	..	10,875	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51
1948	..	9,234	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35
1949	..	8,447	125	14.8	156	18.5	36	4.3	29	3.4	21	2.5	12	1.4	254	30
1950	..	8,113	122	15.0	148	18.2	43	5.3	35	4.3	16	2.0	8	1.0	250	31
1951	..	8,044	125	15.5	141	17.5	36	4.5	40	5.0	19	2.4	11	1.4	247	31

PERCENTAGE CHANGES (5 YEAR PERIODS, ALSO YEARS 1950 AND 1951) IN THE INFANT DEATH-RATE
per 1,000 BIRTHS AS COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1905-1909.

Five year period	Under one week	Under c.e month	One and under three months	Three and under six months	Six and under nine months		Nine and under 12 months		Under one year	
					Percentage increase or decrease over 5 years period 1905-1909		Percentage increase or decrease over 5 years period 1905-1909		Percentage increase or decrease over 5 years period 1905-1909	
					Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909
1905-1909	26·2	—	44·3	—	25·5	—	28·0	—	23·0	—
1910-1914	26·6	+1·5%	44·1	-0·5%	24·7	-3·1%	23·9	-14·6%	20·1	-12·6%
1915-1919	26·4	+0·8%	44·4	+0·2%	21·5	-15·7%	25·0	-10·7%	19·7	-14·3%
1920-1924	23·8	-9·2%	42·3	-4·5%	17·9	-29·8%	16·1	-42·5%	13·2	-42·6%
1925-1929	24·3	-7·3%	38·2	-13·8%	15·1	-40·8%	13·4	-52·1%	11·5	-50·0%
1930-1934	26·1	-0·4%	35·8	-19·2%	12·9	-49·4%	10·6	-62·1%	9·5	-58·7%
1935-1939	23·3	-11·1%	31·9	-28·0%	10·5	-58·4%	9·5	-66·1%	6·6	-71·3%
1940-1944	20·3	-22·5%	27·9	-37·0%	9·0	-64·7%	7·9	-71·8%	5·3	-77·0%
1945-1949	16·2	-38·2%	22·8	-48·5%	8·7	-65·9%	5·9	-78·9%	3·1	-86·5%
1950	15·0	-42·7%	18·2	-58·9%	5·3	-79·2%	4·3	-84·6%	2·0	-91·3%
1951	15·5	-40·8%	17·5	-60·5%	4·5	-82·4%	5·0	-82·1%	2·4	-89·6%

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1951 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.				TOTAL DEATHS REGISTERED IN THE District.				TRANSFERABLE DEATHS.				NET DEATHS BELONGING TO THE DISTRICT.			
		Births.		Nett.		Number.		Rate.		Number.		Rate.		Number.		Rate.	
		Uncorrected Number.	Corrected Number.	4	5	6	7	8	9	10	11	12	13	10	11	12	13
1933	485,000	7,070	6,643	13.7	6,851	14.1	538	261	537	81	6,574	13.6					
1934	486,250	7,691	7,190	14.8	6,666	13.7	619	244	513	71	6,291	12.9					
1935	487,200	7,751	7,211	14.8	6,763	13.9	576	245	463	64	6,432	13.2					
1936	489,800	7,845	7,340	15.0	7,003	14.3	620	283	476	65	6,666	13.6					
1937	491,860†	7,844	7,279	14.8	6,915	14.1	656	314	491	67	6,573	13.4					
1938	494,000	8,159	7,614	15.4	6,592	13.3	597	260	490	64	6,255	12.7					
1939	(a) 497,000	7,434	7,079	14.2	6,821	14.0	619	333	401	57	6,535	13.4					
	(b) 488,000																
1940	465,700	7,459	6,946	14.9	7,178	15.4	638	378	395	57	6,918	14.9					
1941	471,930	7,027	6,667	14.1	6,610	14.0	655	501	407	61	6,456	13.7					
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2					
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0					
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6					
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2					
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7					
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8					
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8					
1949	504,900	9,446	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8					
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3					
1951	503,030	8,700	8,944	16.0	6,983	13.9	595	409	247	31	6,797	13.5					

Area of District in } 38,296.5
acres (land and inland water)

Total population at all ages at the 1951 Census 504,954

† Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 491,880.

(a) Population used for calculation of birth-rate.
(b) Do. death-rate.

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS
DURING THE CALENDAR YEAR 1951.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.												Total Cases removed to Hospital.		
	At Ages—Years.														
	At all Ages.		Under 1.		1 and under 6 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Diphtheria	13	24	..	1	7	3	3	5	3	11	..	4	..	..	..
Dysentery	71	84	1	1	40	36	15	7	3	15	5	17	1	7	6
Encephalitis lethargica	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Erysipelas	31	36	..	..	..	1	..	1	3	1	8	8	..	..	..
Food poisoning	10	13	..	..	1	2	1	..	2	1	2	3	4	5	8
Malaria	..	..	1	..	..	..	..	..	1	..	..	..	..	..	3
Measles	3,849	3,830	169	169	2,493	2,488	1,161	1,149	14	10	10	13	2	1	..
Meningococcal infections	8	5	1	..	3	4	2	..	..	..	2	1	..	..	..
Ophthalmia neonatorum	3	3	3	3	..	..	..	..	..	..	..	..	..	..	5
Paratyphoid fever	..	..	2	..	..	..	..	..	1	..	..	..	..	..	1
Pneumonia (acute primary)	233	177	25	19	28	27	22	14	10	10	41	21	66	37	41
" (acute influenzal)	46	59	1	..	4	1	..	1	5	9	4	19	22	11	27
Poliomyelitis	20	25	1	1	9	7	6	10	1	3	2	4	1	..	..
Puerperal pyrexia	..	..	..	..	..	..	..	..	..	28	..	49	..	..	..
Scarlet fever	249	288	..	2	94	89	136	177	15	10	4	10	..	..	..
Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	..	..	..	..	771	860	85	487	520	214	245	1	6	..	..
Other notifiable diseases	..	..	..	..	182	161	68	42	50	36	22	9	24	6	11
Non-notifiable diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	5,489	5,643	337	324	3,225	3,228	1,597	1,630	64	124	90	148	113	98
Pulmonary tuberculosis	..	..	291(36)	105(16)	..	1	6	8	12(1)	10	49(8)	77(7)	91(20)	78(9)	102(4)
Other forms of tuberculosis	..	..	48(1)	56(2)	3	..	8	9	13	10	7	13(1)	12	20(1)	5(1)

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIa. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1951.

Notifiable Disease.	At Ages—Years												Total Cases removed to Hospital.			
	Number of Cases Notified.															
	At all Ages.		Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Diphtheria	2	..	..	..	..	..	1	..	..	..	..	..
Dysentery	73	82	3	2	40	36	17	7	2	16	4	16
Encephalitis lethargica	1	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	28	31	..	..	..	1	2	..	..	7	7	16
Food poisoning	12	18	2	2	1	3	1	..	2	4	4	4
Malaria	2	..	..	..	..	..	1	..	..	..	..	..
Measles	3,845	3,824	166	166	2,491	2,487	1,162	1,148	13	9	10	13
Meningococcal infections	7	8	1	2	4	5	..	..	..	2	1	..
Ophthalmia neonatorum	3	3	3	..	..	..	..	..	..	..	..	..
Paratyphoid fever	1	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (acute primary)	239	187	26	25	31	25	14	10	10	41	21	66
" (acute influenza)	46	50	1	..	4	1	..	1	5	9	4	19
Poliomyelitis	15	20	1	1	4	6	5	6	3	5	2	2
Puerperal pyrexia	77	..	..	..	..	..	..	..	..	28	..	49
Scarlet fever	246	278	..	1	95	85	134	173	13	9	4	10
Typhoid fever
Whooping cough	770	855	68	83	487	518	213	244	1	6	..	3
Other notifiable diseases	202	198	66	39	70	55	39	37	16	34	7	17
Non-notifiable diseases
Totals	5,489	5,643	337	324	3,2225	3,2228	1,597	1,630	64	124	90	148
Pulmonary tuberculosis	281(38)	195(16)	..	1	6	8	12(1)	10	49(8)	77(7)	91(20)	78(9)
Other forms of tuberculosis	48(1)	56(2)	3	..	8	9	13	10	7	13(1)	12	20(1)

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE II A. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH LOCALITY, (e.g., Parish or Ward) of the District.

NOTIFIABLE DISEASE	CITY	Total																						
		Blethenheim	Westfield	Hyde Park	Wellington	Kirkstall	Harehills	Potternewton	Moorhouse	Meadowood	Woodhouse	Motorway	Allerton	Roundsday	Ricchmond Hill	Potternewton	Haworth	Cross Gates	Beechton	Holbeck	Wortley	Bramley	Stanmingley	Total
Diphtheria	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
Dysentery	..	3	1	2	3	..	1	..	38	1	..	..	..	..	..	..	..	..	..	..	..	..	17	
Encephalitis lethargica	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	155	
Erysipelas	..	8	3	..	1	2	..	1	1	2	..	1	1	..	..	2	5	3	3	4	6	5	4	
Food poisoning	..	1	3	..	..	1	3	5	2	..	1	4	4	..	1	1	..	..	..	..	..	..	59	
Malaria	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	30	
Measles	..	395	314	325	132	282	274	251	260	251	259	247	323	470	223	147	319	292	461	360	149	270	597	
Meningococcal infections	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
Ophthalmia neonatorum	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Paralytic fever	1
Pneumonia (ac. primary)	..	31	15	22	35	15	16	4	4	20	12	8	10	16	8	5	14	23	18	19	14	5	21	17
" (ac. influenzal)	..	4	4	3	4	2	3	2	1	3	3	2	3	2	3	7	9	14	6	..	3	6	4	3
Poliomyelitis	..	1	5	3	..	1	1	1	1	2	..	2	..	1	..	1	..	1	..	..	3	3	..	35
Puerperal pyrexia	4	..	..	7	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	77
Scarlet fever	..	21	37	8	26	8	21	8	15	13	30	29	18	22	24	9	15	20	28	17	2	14	19	24
Typhoid fever	524
Whooping cough	..	67	57	40	42	62	60	31	57	44	54	64	62	23	69	81	63	94	29	53	50	78	215	16
Other notifiable diseases	1,625
Non-notifiable diseases	..	45	29	25	11	9	6	13	24	8	4	15	12	30	14	5	10	11	9	36	6	6	29	4
Totals	..	629	487	452	253	306	387	346	390	360	355	349	428	653	338	194	441	412	606	569	207	334	446	410
Pulmonary tuberculosis	..	23(4)	15(3)	24(2)	17	23(5)	27(4)	10(2)	14(2)	28(2)	8	10(3)	19(1)	20	24(7)	12	22(1)	18(1)	23(1)	17(2)	10(1)	12(1)	10	20(1)
Other forms of tuberculosis	..	6(1)	5	2	6	3	1	3	3	7	4	4	3	2	8	3	5(1)	4	1	6	3	2	4	1
																							11,132	
																							5476(52)	
																							104(3)	

The figures shown in brackets are "Transfer in" Cases and are included in totals.

CITY OF LEEDS.

VITAL AND MORTAL STATISTICS 1918 - 1951

Year	Population	Births	Birth-Rate	Deaths	INFANT MORTALITY			STILL-BIRTHS			MATERNAL MORTALITY			DIARRHOEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		Deaths from Respiratory Diseases (inc. Influenza but excl. Pul. Tuh.)	DIPHTHERIA			SCARLET FEVER		TYPHOID FEVER		MEASLES		WHOOPING COUGH		
					Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death- Rate per 1,000 births	Deaths	Death- Rate	Deaths	Death- Rate		Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	
1918	427,589	7,392	17.3	8,529	19.9	984	133	42.7	..	..	5	19	25	3.38	146	19.8	962	2.25	500	I.17	2,910	542	47	..	570	19	42	5	6,641	417	..	130
9	430,834	7,564	17.6	6,992	16.2	899	119	49.3	..	..	6	29	35	4.62	140	18.5	719	1.67	575	I.33	2,040	811	43	..	1,340	23	33	8	2,438	48	..	66
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	29	28	57	5.07	140	12.5	698	1.56	492	I.10	1,513	885	64	..	1,363	17	29	4	5,459	148	..	100
1	465,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	8	30	38	3.75	184	18.1	641	1.37	554	I.19	1,360	665	38	..	1,526	14	24	2	209	5	..	72
2	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	14	18	32	3.46	92	9.9	653	1.40	595	I.27	1,357	470	28	..	2,722	33	14	7	9,932	152	..	115
3	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	10	35	45	5.18	118	13.6	637	1.36	574	I.22	1,179	368	20	..	2,134	31	9	1	4,683	50	..	32
4	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	9	24	33	3.86	103	12.0	657	1.40	639	I.35	1,777	289	27	..	1,256	20	25	6	6,654	46	..	87
5	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	24	21	45	5.50	149	18.2	599	1.27	606	I.28	1,262	422	39	..	1,166	15	9	3	5,100	39	..	47
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	14	27	41	5.08	147	18.2	585	1.24	657	I.39	1,099	374	26	..	756	5	9	1	7,976	19	..	119
7	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	14	24	38	4.88	88	11.3	558	1.17	649	I.36	1,070	439	28	..	773	6	14	2	8,569	117	..	44
8	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	14	22	36	4.70	105	13.7	542	1.14	698	I.47	976	634	21	94	3,515	18	6	1	3,638	21	..	36
9	478,500	7,426	15.5	7,898	16.5	722	97	42.3	1,369	0.77	10	23	33	4.23	86	11.6	621	1.30	684	I.43	2,037	536	26	107	3,473	29	14	3	9,486	102	..	107
1930	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	0.69	10	22	32	4.05	34	4.5	533	I.11	728	I.52	798	994	54	179	2,383	23	4	2	913	2	..	32
1	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	0.75	17	22	39	5.14	68	9.4	527	I.08	740	I.52	1,047	995	86	318	1,467	12	10	2	10,955	56	..	43
2	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	0.69	8	13	21	2.86	106	15.1	493	I.02	760	I.57	966	889	48	1,524	931	8	9	..	3,540	52	..	41
3	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	0.69	15	12	27	3.87	104	15.7	499	I.03	706	I.46	1,148	1,057	88	726	1,906	9	10	1	3,973	22	..	28
4	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	0.66	15	14	29	3.86	76	10.6	462	0.95	801	I.65	711	2,231	156	2,452	2,711	16	8	1	10,576	90	..	25
5	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	0.69	8	16	24	3.18	62	8.6	435	0.89	803	I.65	772	1,335	60	30,062	2,082	5	5	..	1,341	4	..	48
6	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	0.65	10	14	24	3.13	71	9.7	408	0.83	843	I.72	803	799	36	1,937	1,868	12	4	..	8,744	49	..	28
7	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	0.64	6	11	17	2.24	65	8.9	406	0.83	777	I.58	959	941	44	1,135	2,234	5	16	3	2,373	9	..	19
8	494,000	7,614	15.4	6,255	12.7	490	64	33.1	329	0.67	2	12	14	1.76	94	12.3	397	0.80	879	I.78	625	948	33	1,172	1,717	8	3	..	6,797	18	..	13
9*	(a) 497,000	7,079	14.2	6,535	13.4	401	57	30.2	307	0.62	6	13	19	2.60	54	7.7	413	0.85	847	I.74	662	427	20	894	960	2	12	1	1,673	2	||32	18
1940	465,700	6,946	14.9	6,918	14.9	395	57	30.8	282	0.61	2	13	15	2.09	44	6.4	467	I.00	778	I.67	990	301	II	1,167	643	..	35					

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

BY

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Deputy School Medical Officer.

The incidence of poliomyelitis in 1951 was much lower than in the previous year, 35 cases as against 92 and there were no deaths. Although the incidence was low in comparison with some recent years, it is none the less high when compared with the annual incidence in years prior to 1947. It is quite clear that the epidemiology of poliomyelitis in this country has undergone a change and we must henceforth expect a higher incidence than was usual before 1947. There has been much speculation as to reasons for this change but no wholly satisfactory explanation is forthcoming.

Diphtheria again reached a record low level, there being only 2 cases and no death. Credit for this must go to Dr. Baxter for his work in diphtheria immunisation. This disease, which used to be one of the most important killing diseases in children, has now become of almost negligible importance and will remain so as long as parents continue to have their children immunised.

There was a marked increase in the number of cases of measles. The epidemic which commenced in May, 1950, reached its peak in March, 1951.

There was a marked increase in the notification of puerperal pyrexia but this increase is perhaps more apparent than real. It is due at least in part to changes made in the Puerperal Pyrexia Regulations.

Leeds was affected by the influenza epidemic in the early part of the year and this is reflected in the sharp increase in deaths from influenza.

Notifications of dysentery and of whooping cough both show decreases.

Work on whooping cough immunisation in conjunction with the Medical Research Council has continued and is referred to in the report of the Immunisation Section.

An investigation into diphtheria carrier rates in school children commenced in conjunction with the Education Department and the University Department of Public Health and Preventive Medicine. This is a long term investigation which may prove to be of considerable importance.

The following Regulations came into operation during the year on the dates stated. A circular letter from the Medical Officer of Health, copies of the Regulations and a book of the new notification forms for puerperal pyrexia were sent to all medical practitioners in the city.

The Public Health (Leprosy) Regulations, 1951.—22nd June, 1951.—Leprosy is made notifiable with the object of bringing to treatment or isolating the small but appreciable number of patients requiring such provision. Improved facilities for diagnosis, treatment and, if necessary, isolation have been provided. Notification is strictly confidential and is made to the Chief Medical Officer of the Ministry of Health, Whitehall, London, S.W.1.

The Puerperal Pyrexia Regulations, 1951.—1st August, 1951.—These regulations apply throughout England and Wales, including London. They replace the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926 and 1928, in London and the Puerperal Pyrexia Regulations, 1939, in the rest of the country. The effect of the new Regulations is :—

- (a) Notification is made uniform over the country as a whole (under the old Regulations London had differing arrangements for notification),
- (b) The form of certificate has been simplified and
- (c) A new and more precise definition of puerperal pyrexia has been introduced. "Puerperal pyrexia" now means any febrile condition occurring in a woman in whom a temperature of $100\cdot4^{\circ}$ Fahrenheit (38° Centigrade) or more has occurred within fourteen days after childbirth or miscarriage.

Diphtheria.—The number of accepted cases of diphtheria during the year was 2, the lowest number of accepted cases recorded and compares with an annual average of 45 cases in the five preceding years and 564 in the five pre-war years 1935-1939. This reduction is due, in no small measure, to the successful campaign for immunisation against diphtheria. A report by Dr. Baxter on diphtheria immunisation will be found on page 84.

The 2 cases recorded were treated in Seacroft Hospital; neither had been immunised and both were over 15 years of age. The case-rate for the year was 0·004 as compared with 0·04 for the previous year. There were no deaths.

Scarlet Fever.—Again there was a decrease in accepted cases of this disease during the year; 524 as compared with 566 last year. Of the 524 cases 137 (26·0 per cent.) were treated in hospital. The case-rate was 1·04 as compared with 1·11 for the previous year. The disease continues to be of a mild type. There were no deaths.

Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.—No case of smallpox, typhoid fever, typhus, plague or cholera occurred in the city during the year; 17 contacts and persons from infected countries were kept under observation, as were 5 chronic typhoid carriers. Of the latter, one died during the year from other causes and one was re-admitted to a mental hospital.

Five doubtful cases of smallpox were referred to the Department for a second opinion. Of these, four proved to be chickenpox and one sweat rash.

There was one case of paratyphoid fever. The patient, a man aged 26 years, was an Assistant Medical Officer at a Mental Hospital in Essex. He was on holiday in Leeds where he arrived on 5th February. He had been ill since 22nd January, the date when he left Essex, but had travelled about a good deal in the interval. Whilst at the hospital in Essex he had attended a nurse who was suffering from pyrexia and loose stools and in whose case no definite diagnosis had been made at the time he left. Apart from this there was no other evidence as to the source of infection. The case was removed to Seacroft Hospital.

Measles.—There were 7,669 accepted cases of this disease during the year, an increase of 2,006 on the figure for the previous year. The epidemic which commenced in May, 1950, reached its peak at the end of March. Of the total cases, 82 were treated in Seacroft Hospital. Deaths numbered 3 representing a case mortality of 0·04 per cent. as compared with 2 deaths in 1950 and a case mortality of 0·04 per cent.

During the year 33×5 c.c. and 6×10 c.c. bottles of "convalescent" serum were issued as follows:—

To general practitioners	32
To hospitals and institutions	7

A follow-up in 28 cases treated by general practitioners in Leeds gave the following results:—

Result	Serum issued for :		
	Prevention	Attenuation	
No attack (complete protection) ..	2	4	
"Attenuated" or mild attack ..	2	16	
Attack not attenuated	—	3	
Serum not given or wrongly given or not traced	—	—	1

No complications occurred and there were no cases of jaundice.

Whooping Cough.—There was a decrease of 784 cases of whooping cough, 1,625 cases being accepted as compared with 2,409 in 1950. Of the total cases 56 (3·4 per cent.) were treated in Seacroft Hospital. There were 4 deaths representing a case mortality of 0·2 per cent. as compared with 6 (0·2 per cent.) during the previous year.

Puerperal Pyrexia.—As mentioned earlier in the report the Puerperal Pyrexia Regulations, 1951, came into force on 1st August, 1951. The definition of puerperal pyrexia is extended by these Regulations to "any febrile condition occurring in a woman in whom a temperature of $100\cdot4^{\circ}$ Fahrenheit (38° Centigrade) or more has occurred within fourteen days after childbirth or miscarriage." This resulted in an increased number of notifications being received during the latter part of the year.

The number of accepted cases of the disease was 77 as compared with 16 during the previous year and 47 in 1949. Of the total 63 (81·8 per cent.) occurred in hospitals or institutions; 4 (5·2 per cent.) in the practices of general practitioners and 10 (13·0 per cent.) in midwives' practices. The number of cases removed to Seacroft Hospital was 3 (4·0 per cent.). There were no deaths.

Ophthalmia Neonatorum.—The number of accepted cases of this disease during the year was 6, the same as for the previous year and 16 in 1949. Of these 2 (33·3 per cent.) were treated in Seacroft Hospital. In each case there was a perfect recovery.

Erysipelas.—Again there was a decrease in the number of accepted cases of this disease during 1951; 59 as compared with 96 in 1950 and 109 in 1949. Of these 13 (22·0 per cent.) were treated in Seacroft Hospital.

Malaria.—Two cases were reported during the year compared with one during the previous year, the infection in both cases being contracted abroad. The patients were admitted to Seacroft Hospital.

Dysentery.—Although there was a decrease in the number of accepted cases of this disease, 155 as compared with 539 last year, the incidence still remains high. Of the 155 cases 49 occurred at home, 50 in hospitals and institutions and 56 in day nurseries. The number treated in Seacroft Hospital was 42 or 27·1 per cent. of the total. Of the cases, 1 was *Flexner*, 121 *Sonne* and one *amæbic* while the remaining 32 were not typed. The *amæbic* case, a woman aged 56 years, was admitted to St. James's Hospital on 20th April and died on 28th May. The cause of death was 1a. Amæbic dysentery, b. Ulcerative colitis.

As in 1950 the disease was most prevalent in the early months of the year (February, March and April) and outbreaks of the *Sonne* type again occurred in day nurseries, hospitals and institutions. These accounted for 90 cases as follows: day nurseries 50, hospitals and institutions 40. Children, adults and staff were affected. All these cases were bacteriologically confirmed and of the 90 cases 18 were admitted to Seacroft Hospital.

In June-July a further 4 cases occurred in a day nursery which had been affected earlier in the year.

All cases recovered and in none of the outbreaks was it possible to trace the source of infection.

During November and December an outbreak of gastro-enteritis occurred among the children living at South Lodge Institution and 16 cases were removed to Seacroft Hospital. In 3 of these cases faeces tests were positive for *Sonne* dysentery and one was re-diagnosed pneumonia.

Acute Poliomyelitis (including Polioencephalitis).—It is gratifying to record a fall in the incidence of this disease during the year. This fall was also general throughout the country, the number of notifications being less than half the number in 1950. Accepted cases numbered 35, compared with 92 last year and 109 in 1949.

Of the 35 cases, 30 (85·7 per cent.) were treated in Seacroft Hospital, 3 (8·6 per cent.) in other hospitals and 2 (5·7 per cent.) at home. There were no deaths. The corresponding figures for the past four years are as follows :—

	Cases	Deaths
1950 ..	92	9 (9·8 per cent.)
1949 ..	109	10 (9·2 per cent.)
1948 ..	6	1 (16·7 per cent.)
1947 ..	54	5 (9·3 per cent.)

The highest monthly incidence was in October when there were 9 cases. The following tables show the monthly distribution of cases and the age groups affected :—

MONTHLY DISTRIBUTION.

December, 1950	..	1
January, 1951	..	—
February	..	—
March	..	—
April	..	1
May	..	1
June	..	4
July	..	6
August	..	2
September	..	4
October	..	9
November	..	7
December	..	—
	—	
Total ..	..	35
	—	

AGE GROUPS.

	0-5	5-10	10-15	15-25	25-35	35-45	45-55	Totals
Males ..	5	3	2	3	2	..	..	15
Females ..	7	3	3	5	2	..	..	20
Totals ..	12	6	5	8	4	..	..	35

Of the total, 26 had paralysis and 9 had no paralysis. At the end of the year 14 cases had recovered and 21 were still under treatment with the following results :—

(a) Slight paralysis or weakness	16
(b) Severe paralysis or weakness	5

Of the 28 wards in the city, 18 contributed to the number of cases. Those with more than 2 cases were Blenheim (5), Westfield (3), Crossgates (3), Hunslet Carr (3), Middleton (3) and Wortley (3).

In collaboration with the Medical Research Council an investigation was started during the year into the role of "activating agents" in the aetiology of poliomyelitis. The aim of the investigation is to find out whether a particular pattern of inoculations, surgical operations, illnesses, injuries or physical activities is peculiar to persons who develop poliomyelitis. For the present the investigation is being confined to cases in children below school leaving age admitted to Seacroft Hospital. The scheme comprises the following:—

- (a) Serological investigations by Dr. McCallum at the Central Public Health Laboratory, London.
- (b) Clinical investigations by Dr. Benn at Seacroft Hospital, Leeds, and Dr. Garland or Dr. Parsonage of the Leeds General Infirmary who are seeing each case in Seacroft Hospital.
- (c) Examination of siblings by Dr. Garland's Registrar at the Leeds General Infirmary, and
- (d) Investigation of control children by Dr. Bradshaw, Deputy Medical Officer of Health.

From 1st April, individual case record cards on all notified cases of poliomyelitis, setting out *inter alia*, details of recent prophylactic inoculations and tonsillectomy were forwarded to the Medical Research Council in London by the Medical Officer of Health.

Encephalitis Lethargica.—One case of this disease was notified during the year and there was one death (a woman aged 70 years) certified as due to the disease though not notified during life.

Meningococcal Infection.—During the year there were 15 accepted cases of meningococcal infection, an increase of 12 on the figure for 1950. Nine of the cases were treated in Seacroft Hospital. Five of the cases died giving a case mortality of 33·3 per cent.

Anthrax.—Two cases of this disease were reported during the year. One of the patients was employed at a tannery within the city and the other at a large tannery outside the city boundary. Detailed information was forwarded to H.M. Inspectors of Factories at Leeds who are responsible for measures of protection within the factories. The Divisional Medical Officer of the district in which the tannery outside the city was situate was also notified. As both patients resided in Leeds the necessary measures of disinfection were carried out by this Department. The patients recovered.

Food Poisoning.—During the year 19 cases of *Salmonella* infection, in separate households, came to the notice of the Department. The organisms isolated were as follows :—

<i>Salmonella typhi-murium (B. Aetrycke)</i>	..	11
<i>Salmonella thompson</i>	..	5
<i>Salmonella derby</i>	..	2
<i>Salmonella newport</i>	..	1

Of these cases, 12 were admitted to Seacroft Hospital. Enquiries in all 19 cases failed to reveal the source of infection, although in one household where the organism *Salmonella thompson* was isolated from the faeces of four members of the family, a particular article of food was strongly suspected of having caused the illness but bacteriological proof could not be obtained.

One of the two cases in which the organism *Salmonella derby* was isolated originally occurred in November, 1950, was discharged from Seacroft Hospital in February, 1951, after a series of negative faeces specimens had been obtained and re-admitted to hospital a few days after discharge when faeces tests were again found positive. The patient was a child aged four months.

On 13th April, 30 persons who had eaten a mid-day meal in a works canteen on the previous day reported having had an attack of abdominal pain followed by diarrhoea. The onset occurred about 12 hours after eating the meal. Investigations were made and it was ascertained that about 550 persons had each been served with a similar meal. The symptoms in those affected were extremely mild and all were at work on the following day. The only article of food to come under suspicion was stewed meat and the remains of this were submitted for bacteriological examination but no pathogenic organisms were isolated.

On 4th May information was received that 14 members of the kitchen staff at a school kitchen in the city had been affected with diarrhoea. The kitchen concerned serves 21 schools with meals. At one of the schools 22 boys and two masters reported having had an attack of diarrhoea after eating a mid-day meal on 3rd May. The symptoms in all cases were extremely mild. Nine specimens of various foods supplied at the meal were submitted for bacteriological examination but all were negative for pathogenic organisms. Faeces specimens were obtained from the 14 members of the kitchen staff and 6 of the boys but all gave negative results.

Eleven cases of alleged food poisoning, in separate households, were notified by general medical practitioners, but in no case was it possible to trace the source of infection.

All cases recovered.

Influenza.—There were 146 deaths from influenza as compared with 21 in 1950. The death-rates per thousand population were 0.29 and 0.04 respectively.

Pneumonia.—Accepted cases during the year numbered 531 of which 426 (80.2 per cent.) were primary and 105 (19.8 per cent.) influenzal. The corresponding figures for 1950 were 350 of which 328 (93.7 per cent.) were primary and 22 (6.3 per cent.) influenzal. There were 407 deaths from all forms of pneumonia (including 13 deaths from pneumonia of the newborn) compared with 267 last year. The mortality rates were 0.81 and 0.52 respectively.

Bronchitis.—There were 631 deaths assigned to this disease as compared with 422 in the previous year. The death-rates were 1.25 and 0.82 respectively.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from this disease during 1951 was 7 as compared with 13 for the previous year. The death-rates per 1,000 births were 0.87 and 1.60 respectively.

Malignant, Lymphatic and Hæmatopoietic Tissue Neoplasms.—The appended table gives details of deaths certified as due to malignant, lymphatic and hæmatopoietic tissue neoplasms. The total of 1,021 deaths in this group of diseases is 41 fewer than in the previous year.

MALIGNANT NEOPLASMS AND NEOPLASMS OF LYMPHATIC AND
HAEMATOPOIETIC TISSUES.

Cause of Death*	Age Groups														All Ages	Grand Total		
	-1		1-		2-		5-		15-		25-		45-		65-			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Malignant Neoplasms :																		
Buccal cavity and pharynx (140-148)									4	2	6	4	5	2	15	8
Oesophagus (150)								1	4	3	6	2	3	2	13	8
Stomach (151)							3	3	44	15	38	43	14	28	99	89
Other digestive organs (152-159)							3	5	41	44	61	45	30	24	135	118
Trachea, lung and bronchus (162-163)							8	4	79	17	40	4	14	2	141	27
Other respiratory organs (160, 161, 164, 165)									13	3	7	..	4	1	24	4
Breast (170)									15	1	60	..	9	..	17	101
Cervix uteri (171)								3	..	17	..	3	..	2	..	25
Other parts of uterus (172-174)									7	..	3	..	5	..	15	15
Male genital organs (177-179)							1	..	3	..	12	..	9	..	28	..
Skin (190, 191)									2	1	..	..	1	..	3	1
Bone and connective tissue (196-197)									1	2	1	2	1	2	..	6
All other sites (Rem. of 140-199)	1	1	..	..	3	2	..	1	2	5	23	30	16	13	7	
Total	1	1	..	..	1	5	3	1	2	21	39	227	206	192	132	91
																	538	483
																	1,021	

* International List Numbers are shown in brackets.

Venereal Diseases.—The number of deaths certified as due to syphilitic diseases was 22, which is equal to a death-rate of 0·04 per thousand of the population. The number of deaths in 1951 shows a decrease of 9 as compared with the figure for the previous year.

Work of the Treatment Centre.—Details of the number of new cases registered at the Treatment Centre at the Leeds General Infirmary from Leeds and the other contributory areas are given in the following table :—

**PERSONS TREATED AT THE GENERAL INFIRMARY AT LEEDS
(LOCAL TREATMENT CENTRE).**

	Year 1951.		Year 1950.		Increase or Decrease.	
	M.	F.	M.	F.	M.	F.
Syphilis .. first cases ..	103	86	142	116	-39	-30
Gonorrhœa ..	185	68	272	103	-87	-35
Other diseases not Venereal ..	790	362	891	343	-101	+19
Total ..	1,078	516	1,305	562	-227	-46
Total attendances of all cases	11,544		21,707		-10,163	

The number of cases ceasing to attend before completion of treatment or final test of cure was 245 or 6·9 per cent. of the total attending the Centre. The corresponding figure for 1950 was 213 or 4·9 per cent.

Details of new Leeds cases registered during the year are given in the table appended.

LEEDS PATIENTS.

	Year 1951		Year 1950		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis .. first cases ..						
Early infections ..	13	12	17	19	-4	-7
Late—all other ..	65	52	74	63	-9	-11
Gonorrhœa	160	55	226	76	-66	-21
Other diseases not venereal	607	308	659	271	-52	+37
Total	845	427	976	429	-131	-2
Total attendances of all cases	12,328		17,331		-5,003	
Aggregate No. of In-patient days..	2,295		2,733		-438	

Number of persons under treatment or observation at 31st December, 1951:—

			Males	Females	Total
Syphilis .. .. ..	..	..	484	347	831
Gonorrhœa .. .. ..	..	..	45	15	60
Other diseases not venereal .. .. ..	..	..	125	25	150
Totals .. .. ..	..	..	654	387	1,041

Tuberculosis

STATISTICS.

The number of cases on the register at the end of 1951 was 3,101 as compared with 3,196 at the end of 1950, a decrease of 95.

Notifications.—During the year 476 cases of respiratory tuberculosis (of which 52 were transfers from other areas) and 104 non-respiratory (of which 3 were transfers from other areas) were notified, making a total of 580 cases, of which 55 were transfers. Of the total 329 were males and 251 females. Compared with the previous year this is a decrease of 45 in the respiratory and an increase of 6 in the non-respiratory notifications and compared with the average of the previous five years there were decreases of 31 in the respiratory and 26 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.95, of non-respiratory 0.21 and of all forms of the disease 1.15, as compared with 1.02, 0.19 and 1.21 respectively for the previous year.

Of the total cases of respiratory tuberculosis notified, 7.8 per cent. were children under 15 years, 26.5 per cent. persons between 15 and 25 and 65.8 per cent. were in the remaining age groups. The corresponding figures for the previous year were 8.1 per cent. 24.2 per cent. and 67.7 per cent. respectively.

As regards the non-respiratory type of disease, 41.3 per cent. were children under 15 years and 58.7 per cent. were persons over 15 years. The corresponding figures for the previous year were 43.9 per cent. and 56.1 per cent. respectively.

Of the total cases notified, 327 were by the Chest Physician, 36 were by medical practitioners, 162 came from hospitals and 55 were by transfer from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 29 and the number of non-respiratory 9, making a total of 38 or 6.6 per cent. of the total notifications for the year. This is an increase of 13 on the figure for the previous year.

Out of a total of 182 deaths from tuberculosis of all forms 14 or 7.7 per cent. were notified in the same year as death occurred, 5 or 2.7 per cent. within 28 days of notification and 12 or 6.6 per cent. within 7 days of notification. There were 9 posthumous notifications.

The following tables give details of notifications of tuberculosis received during the year :—

RESPIRATORY.

Ages	-I	I-5	5-I5	I5-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	6	12 (1)	49 (8)	57 (16)	34 (4)	52	50 (4)	21 (3)	281 (36)
Females	I	8	10	77 (7)	53 (6)	25 (3)	11	9	I	195 (16)
Totals..	I	14	22 (1)	126 (15)	110 (22)	59 (7)	63	59 (4)	22 (3)	476 (52)

NON-RESPIRATORY.

Ages.	-I	I-5	5-I5	I5-25	25-35	35-45	45-55	55-65	65+	Total
Males..	3	8	13	7	8	4	3	2 (1)	..	48 (1)
Females	..	9	10	13 (1)	15 (1)	5	3	1	..	56 (2)
Totals..	3	17	23	20 (1)	23 (1)	9	6	3 (1)	..	104 (3)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Site	Males	Females	Total
Central nervous system	..	4	6
Abdominal	5
Spine	..	4	4
Bones and joints	..	13	6
Skin	..	1	1
Lymphatic system	..	18	25
Genito-urinary system	..	7	8
Other sites	..	1	1
Totals	..	48	56
			104

Deaths.—The total deaths from tuberculosis of all forms during the year numbered 182, of which 121 were males and 61 females. In the previous year the total was 193, of which 128 were males and 65 females. Of the total, respiratory tuberculosis accounted for 166 or 91·2 per cent. and non-respiratory 16 or 8·8 per cent. The death-rate from respiratory tuberculosis was 0·33, from non-respiratory 0·03 and from all forms of the disease 0·36 as compared with 0·35, 0·03 and 0·38 respectively for the previous year.

Set against the average rates for the previous five years these figures represent a decrease of 0·02 in the respiratory rate, no change in the non-respiratory rate and a decrease for all forms of the disease of 0·02.

The following tables give details of deaths from tuberculosis during the year :—

RESPIRATORY TUBERCULOSIS.

AGES AT DEATH.

1951	I	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65 +	Total
Males ..	..	I	..	2	7	20	31	27	26	114
Females	I	..	2	4	20	6	4	6	9	52
TOTALS	I	I	2	6	27	26	35	33	35	166
Average 10 years 1941-1950	I	I	2	37	55	57	61	43	23	279

NON-RESPIRATORY TUBERCULOSIS. DEATHS.

1951	Tubercular meningitis	Abdominal.	Bones and Joints	Other tuberculosis	Total
Males ..	3	I	..	3	7
Females ..	5	..	..	4	9
Totals ..	8	I	..	7	16

AGES AT DEATH.

1951	-I	I-5	5-15	15-25	25-35	35-45	45-55	55-65	65 +	Total
Males ..	I	2	..	I	..	I	I	I	..	7
Females ..	..	4	I	I	..	I	..	I	I	9
Totals ..	I	6	I	2	..	2	I	2	I	16
Average 10 years 1941-1950	2	II	7	5	3	3	2	2	2	35

The following table gives details of notifications of and deaths from tuberculosis during the years 1936-1951:—

TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Respiratory tuberculosis.		Non- respiratory tuberculosis.		All forms tuberculosis.		Respiratory tuberculosis.		Non- respiratory tuberculosis.		All forms tuberculosis.	
	Deaths.	Death- rate.	Deaths.	Death- rate.	Deaths.	Death- rate.	Cases.	Care- rate.	Cases.	Care- rate.	Cases.	Care- rate.
1936	346	0.71	62	0.13	408	0.83	531	1.08	163	0.33	694	1.42
1937	354	0.72	52	0.11	406	0.83	548	1.11	214	0.44	762	1.55
1938	336	0.68	61	0.12	397	0.80	511	1.03	176	0.36	687	1.39
1939	353	0.72	60	0.12	413	0.85	555	1.14	137	0.28	692	1.42
1940	416	0.89	51	0.11	467	1.00	557	1.20	110	0.24	667	1.43
1941	362	0.77	46	0.10	408	0.86	598	1.27	162	0.34	760	1.61
1942	310	0.67	47	0.10	357	0.77	638	1.38	170	0.37	808	1.75
1943	325	0.72	53	0.12	378	0.83	595	1.31	151	0.33	746	1.64
1944	277	0.61	39	0.09	316	0.70	631	1.40	157	0.35	788	1.75
1945	286	0.63	32	0.07	318	0.70	579	1.28	156	0.35	735	1.63
1946	261	0.54	27	0.06	288	0.60	519	1.08	178	0.37	697	1.45
1947	305	0.62	37	0.08	342	0.70	518	1.05	133	0.27	651	1.32
1948	245	0.49	28	0.06	273	0.55	497	0.99	132	0.26	629	1.25
1949	244	0.48	30	0.06	274	0.54	480	0.95	108	0.21	588	1.16
1950	178	0.35	15	0.03	193	0.38	521	1.02	98	0.19	619	1.21
1951	166	0.33	16	0.03	182	0.36	476	0.95	104	0.21	580	1.15

Handling of Food, etc., by Infected Persons.—It was not found necessary to exercise the powers conferred by Section 42 of the Leeds Corporation Act, 1930, during the year.

REPORT OF THE WORK OF THE LEEDS CHEST CLINIC

BY

J. ASPIN, M.A., M.D., D.M.R.D., *Chest Physician*

Apart from the temporary effect of two wars, the tuberculosis death-rate for Leeds has declined progressively since the turn of the century. The figures for 1951 (182 deaths or 36 per 100,000) are again the lowest on record. The present death-rate is only just over half (51 per cent.) of the figure for 1947 and just over a quarter (26 per cent.) of that for 1923, the comparable year after the First World War. During recent years deaths from pulmonary tuberculosis have amounted to 245 (1948), 244 (1949), 178 (1950) and 166 (1951), while the corresponding non-pulmonary deaths have been 28, 30, 15 and 16. In spite of this gratifying fall, the immediate case-mortality is still high. Nearly 13 per cent. of the new pulmonary cases notified in 1950 had died within twelve months. When the deaths from pulmonary tuberculosis are divided according to age and sex, as below, interesting differences are revealed.

DEATHS FROM PULMONARY TUBERCULOSIS, 1951, LEEDS

Age in Years	-1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65 +	Total
Males ..	..	1	..	2	7	20	31	27	26	114
Females	1	..	2	4	20	6	4	6	9	52
TOTALS	1	1	2	6	27	26	35	33	35	166

Pulmonary tuberculosis is evidently a fatal disease for young adult females and an even greater danger to middle-aged and elderly men. At a time when it is exceptionally hard to find sanatorium beds for men above 45, half of the total mortality is occurring in males above this age. Quite apart from the needs of the individual patient, the need for a breathing-space to arrange re-housing and the examination and, if practicable, B.C.G. vaccination of contacts, calls for priority admission of men in this age group, even if only for a short stay in hospital.

Although changes in tuberculosis mortality become apparent within about five years of the events which cause them, the morbidity

figures are slower to follow suit. The numbers of new cases of pulmonary tuberculosis notified to the Medical Officer of Health in 1948, 1949, 1950 and 1951 were 497, 480, 521 and 476 respectively, the non-pulmonary notifications for the same years amounting to 132, 108, 98 and 104. Once again, the figures for pulmonary tuberculosis in 1951 are worth sub-dividing according to age and sex, as below.

NOTIFICATIONS OF PULMONARY TUBERCULOSIS, 1951, LEEDS.

Ages	-1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Males ..	..	6	12	49	57	34	52	50	21	281
Females	I	8	10	77	53	25	11	9	1	195
Totals..	I	14	22	126	110	59	63	59	22	476

Clearly, tuberculosis is becoming less immediately fatal, although only slowly less prevalent. Much of the slow change between the wars was probably due to the good effects of improvement in the standard of living and in general hygiene, together with special welfare arrangements for tuberculous families. It may well be that medical treatment with the drugs (P.A.S. and streptomycin) and the new operations such as lung resection are responsible for the sudden fall of the death-rate, by taking younger patients through critical, previously fatal, phases of the disease and setting them on the road leading to final cure. However, the value of routine but effective measures such as contact review, B.C.G. vaccination and re-housing must not be overlooked. There are still many preventable cases of tuberculosis in Leeds. Prevention should not be forgotten in excessive zeal for treatment. If economies have to be made they should not fall on preventive measures alone.

Contact Review.—Tuberculosis is an infectious disease. In Leeds, where large-scale pasteurisation has virtually removed the risk of picking up tuberculosis from infected milk, careless coughing is the real danger. Widening public consciousness of the fact that spitting is a dirty habit and that it is unfair to cough without at least turning the head to one side and putting a hand over the mouth, is steadily reducing the tuberculosis hazard. Physicians and surgeons are now able to render non-infectious and cure more and more cases. In spite of all this, one can still find a further previously unknown sufferer from the disease by the routine examination of domestic

contacts in every tenth tuberculous household. Work of this type is important for two reasons. The newly discovered cases may well be more readily curable, through earlier diagnosis, and those who have been exposed but have so far escaped infection can be protected against tuberculosis by B.C.G. vaccination. The Leeds Chest Clinic is rather proud of the efficiency with which preventive work of this type is carried out and it is gratifying to record yet a further increase during the year in the numbers of contacts examined. Since numbers alone are not all, investigation has been undertaken during recent years to discover which groups of contacts can most productively be kept under review for the good of both the individual and the community. The Leeds Chest Clinic now tries to carry out the following programme :—

1. All original domestic contacts are seen at once and X-rayed if above 15.
2. Persons under 15 years of age receive tuberculin skin-tests. If the results are positive, the contacts are X-rayed, seen again after a few months or a year and a further examination is deferred until the age of puberty. If the skin-test is negative, the contacts are offered B.C.G. vaccination. It goes without saying that contacts with primary or non-pulmonary tuberculosis are given suitable advice and the suspected or manifest cases of adult-type disease are appropriately handled. When all this has been done, the back of the contact problem has been broken.
3. The amount of adult-type disease developing among contacts is high at first, but falls off to the level of the attack-rate in the general population within five years. If the initial X-ray film is clear, the health visitors try to secure annual attendance for chest X-rays for the next five years in the case of adolescents and adults up to the age of thirty and thirty-five. Older contacts whose initial films are clear are dismissed from observation about a year after the last effective exposure.

The above programme is designed for " real " contacts of " real " infectious cases and is modified where contact is slight or temporary.

B.C.G. Vaccination.—The steady expansion of the campaign for B.C.G. vaccination against tuberculosis has been one of the bright spots of the year. Through co-operation between the Maternity and Child Welfare Department, Ante-natal Clinics and Maternity Units

in the various hospitals, it is now possible to offer B.C.G. vaccination to practically every infant born into a tuberculous household. Where segregation is required, infants can be taken into the Wharfedale Children's Hospital at Menston for the necessary period. There are regular monthly sessions at the Clinic for the vaccination of older contact-children. For the period between April, 1950, and 31st December, 1951, B.C.G. vaccination was completed at the Clinic in 289 contact cases, sub-divided by age as below, and also in 51 nurses and staff of various institutions where special protection was desired.

B.C.G. VACCINATIONS—AGE GROUPS.

<i>-1</i>	<i>1-4</i>	<i>5-9</i>	<i>10-14</i>	<i>15-24</i>	<i>25+</i>	All Ages
92	112	53	29	3	..	289

The Medical Research Council's Unit is vaccinating something like 70 per cent. of the city's susceptible school leavers. When this research programme has been completed in 1953, it is intended to carry on with the B.C.G. vaccination of all tuberculin-negative school leavers. It is hoped that these programmes will reduce even further the mortality from tuberculosis among infants and cut down the upswing of morbidity among adolescents and young adults.

TUBERCULOSIS—SOCIAL WORK

BY

Miss B. M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

During the year the Almoners interviewed 3,168 patients and their relatives.

During the first three months of the year, the Leeds Association for the Care of Consumptives considered 525 applications for assistance and made grants in 222 cases, mainly for clothing (82 cases) and beds or bedding (74 cases).

After 31st March applications for help were dealt with by members of the Health Committee who met weekly at the Chest Clinic. A representative of the National Assistance Board attended these meetings and has been most helpful in resolving the financial problems of patients and their families.

During the year 818 applications for help were considered. Grants of one pint of milk per day, free of charge, were made or continued in 532 cases and grants of free priority rations of butter and eggs were made or continued for 50 patients. Beds complete with bedding were loaned to 29 patients and various items of bedding to 124 patients. Bedsteads and bedding whenever possible are recalled when a patient goes into sanatorium. When the patient is ready for discharge from sanatorium, he applies for the loan of a bed for a further period. New or secondhand clothing was supplied to 213 patients and their families. Our stock of secondhand clothes has been very low throughout the year. Men's overcoats and suits are particularly needed.

Nursing requisites were loaned to 119 patients being nursed at home and arrangements made for the supply of 12 surgical appliances and the repair of 10.

Certificates were issued to 1,478 patients enabling them to obtain priority rations.

During the year 241 patients were referred to the National Assistance Board for allowances. These included newly-notified patients, patients who had worked for a while and then relapsed, patients discharged from sanatorium, elderly persons eligible for supplementation of pension and others in temporary financial difficulty owing to the incapacity of the wage earner. 30 patients were referred for help in kind; 28 of these applications were for bedding or clothing, one for fares to enable a patient's family to visit him in sanatorium and one for funeral expenses. The Education Department was approached in 19 cases for clothing and fares for school children and in one instance to obtain help for a patient to take a correspondence course. The Ministry of Pensions was approached for help with clothing for the families of Service pensioners.

The colder weather brought its usual requests for priority allocations of coal and applications were made to the Fuel Officer on the recommendation of the Chest Physician. Help has also been sought for patients with domestic difficulties from the Care of Children, Maternity and Child Welfare and Mental Health Departments; and from the Probation Office and Ministry of National Insurance. One problem family was referred to the N.S.P.C.C. and, thanks to their visits, the father of the family found work and is now supporting his family which for years had been a charge on public funds.

During the year 71 patients were referred to the Home Help Department and 39 to the Convalescent Department. We are very grateful for the sympathetic help which our patients receive from these departments.

Patients referred to the Ministry of Labour numbered 91. Some of these were placed in suitable employment, one being found work on the same day ; others were considered likely to benefit by a preliminary rehabilitation course and were referred to the Industrial Rehabilitation Unit. Others were recommended for training courses ranging from tailoring to typing.

The Remploy Factory changed from light engineering to pre-packaging and accepted 15 men and 4 women for employment at the Factory.

Where assistance cannot be provided from statutory sources, appeal is made to one of the many voluntary organisations. Since April 1st the Almoners have, by invitation, attended the Case Committee of the Leeds Association for the Care of Consumptives and presented 389 applications for help, to which the Association has responded generously. 93 applications were made to other voluntary organisations ; of these applications 41 were to the British Red Cross Society and the remainder to one or other of 25 voluntary organisations.

The grants made by voluntary organisations included long-term help, chiefly grocery orders, pocket money for patients in sanatorium and fares to enable their families to visit them regularly. Grants to meet specific situations covered such varied needs as debts, convalescent holidays, decorations and furnishing, removals, wireless and licences, occupational therapy, clothing, bedding, repairs to spectacles, sweets for children and help in the home. The British Red Cross Society made a gift of 32 food parcels to patients selected by the Almoners in addition to assistance given in response to requests.

Housing problems continue to raise difficulties for tuberculous families. Houses of the "one up, one down" variety present a problem if an infectious patient is a member of the household and furnished rooms are also unsuitable for tuberculous patients. One newly notified patient was found to be sharing a small bedroom with three children of school age and under. Single men in lodgings or

hostels are in particular difficulties ; there are usually no facilities for nursing care and the patient is fortunate if he is not asked to leave when his disease becomes known. Patients of no fixed abode present another thorny problem as no hostel or lodging will accept them.

The Housing Committee continue to give substantial help in the housing of tuberculous families as the following table shows.

	1949	1950	1951
Families remaining on priority housing list			
January 1st	296	292	273
Families re-housed	152	110	107
No. of families added during year	201	160	136
No. of applications deleted	53	69	50
Families on housing list at December 31st ..	292	273	252

The Senior Almoner paid eighteen visits to Leeds patients in Middleton Sanatorium during the year. These visits are particularly useful. Many patients have been helped with their own problems, or with difficulties experienced by their families ; but apart from assistance given during the patients' stay in sanatorium, contact with the Almoner has proved valuable. When patients attend the Chest Clinic again after discharge from sanatorium, they greet the Almoner like an old friend and are ready to ask advice and help.

The Senior Almoner is a member of the Case Committee of the Leeds Council of Social Service and attended meetings regularly during the year. She visited the Industrial Rehabilitation Unit and the Psychotherapy Units at St. James's Hospital and at Clarendon Road by invitation of the Social Workers there. Social Workers from Barnsley and Middlesbrough visited the Department during the year and the Senior Almoner lectured to student health visitors at the Chest Clinic.

The year ended with the seasonable activities of Christmas. Thanks to the generosity of the Leeds Workpeople's Hospital Fund and the Toy Appeals Fund of the " Yorkshire Evening News " and the " Yorkshire Evening Post," the almoners were able to distribute books and toys to 397 children from 161 families. Many patients have no possibility of providing the little extras which mean so much to children at Christmas and were overjoyed to receive these gifts.

Disinfestation and Disinfection.

DISINFESTATION AND DISINFECTION

BY

C. W. Lamb,
Supervisor.

Verminous Dwellings and Articles.—Steady progress has been maintained in the disinfection of premises of many kinds, including dwelling-houses (both Corporation or privately owned), factory canteens, restaurant kitchens, institutions and hospitals.

The more common insect pests eradicated or controlled included bed-bugs, cockroaches, steam flies, crickets, wood-boring beetles and house flies. Isolated infestations brought about by grain and wheat pests associated with stored food products such as *anobiidae* (*stegobium panicum*), *curculionidae* (grain and rice weevils), *dermestidae* (bacon and larder beetles) and flour moths were brought to the notice of the Department, but as these types of infestations cannot be controlled efficiently by the limited methods available to the Disinfestation Section, they were referred to the Ministry of Agriculture and Fisheries or to private firms specialising in hydrogen cyanide fumigations.

The synthetic substances D.D.T. and benzine hexachloride are now firmly established as powerful insecticides and are employed in many ways according to the type and degree of infestation. In spray form, in a water or solvent base, they are mainly used in the eradication of bed-bugs, body lice, steam flies, house flies, fleas, etc., and in the control of wood-boring beetles and ants (*monomorium pharoensis*). For the control of cockroaches, crickets and similar types of pests, the two insecticides are distributed by special blowers in powder form.

During the year the Housing Department requested the disinfection of 229 Corporation dwellings. Each dwelling was checked for type and degree of infestation and disinfested accordingly. Although one application of insecticide will eradicate a bed-bug infestation, it is sometimes found necessary to spray in the first instance to protect workmen engaged in the process of re-decoration and then to apply the protective toxic film of insecticide after decorations have been completed. Bed-bug disinfections have predominated in this service to the Housing Department, but quite a number of cockroach, cricket and wood-boring beetle infestations were encountered.

As in previous years, the hydrogen cyanide plant was used for the disinfection of the furniture of prospective tenants of Corporation houses. After inspection, the effects of these people, coming from verminous premises, were removed in special gas container vans provided for the purpose and the vacated premises sprayed. On arrival at the Centre, infested furniture was subjected to hydrogen cyanide treatment, whereas bedding and soft furnishings, unsuitable for this type of fumigation, were disinfested by steam. Low pressure current steam disinfectors, installed early in the year at the Kidacre Street Station, have been found excellent as a means of disinfesting verminous clothing and bedding.

Thus 406 removals were completed for the Housing Department, involving the treatment by H.C.N. of 23,577 articles and by steam of 8,336 articles.

Apart from this specialised work for the Housing Department, other Corporation Departments took advantage of the facilities provided by the Section. For the Education Department, routine spraying against flies and mosquitoes has continued at School Camps, a number of school kitchens have been treated for cockroaches and steam flies and prophylactic treatment against louse, flea and bed-bug infestation was provided at one school serving a slum area in the city. Disinfection of valuable antiques and museum pieces infested by wood-boring beetles was carried out for the Director of City Museums.

The Waterworks Department was confronted with several cases of dry rot infestation, mainly concerning the fungus *merulius lachrymans*. The appliances and technical experience of the Supervisory Officer were put at the disposal of the Department concerned. Miniature flame throwers were extensively used in the process of disinfection to burn out the fungus and spores, specific fungicides were sprayed and by increasing the ventilation in all cases, no further signs of active fungus have been recorded.

Swarms of flies and mosquitoes hampered the workmen on boring sites in the Washburn Valley and after extensive spray treatment of the site and the surrounding area, some measure of relief was obtained. If this treatment had been carried out early in the year, control would have been much easier in that fewer flies or mosquitoes would have reached adult stages and thereby extensively curtailed breeding.

In addition to the Departmental work, many types of infested premises, other than Corporation properties, were dealt with on request. These included properties of the Hospital Boards, Ministries of Works and Supply, hotels, restaurant kitchens, factory canteens, etc. Cockroaches, steam flies and crickets predominated and were effectively controlled. Property owners and tenants of privately owned dwelling-houses sought the advice of the Section. Many different kinds of beetle were submitted for identification; the *nipitus heloleucus* (golden spider beetle), *cimex lectularius* (bed-bug), *ptinus tectus* and *anobium punctatum* were among the more common species identified.

In all 827 premises were visited, of which 642 were disinfested. In the case of wood worm and moth infestations, carpets and furniture (amounting to 4,239 articles) were treated by hydrogen cyanide at the Stanley Road Centre whereas soft furnishings, verminous bedding and clothing, comprising 1,858 articles, were disinfested by steam at the Kidacre Street Station.

Still greater use of the facilities offered by this Section of the Department could be made by other Departments and by the general public. The most up-to-date equipment for insecticidal spray and powder treatment is available and the hydrogen cyanide plant, now specialising in moths and wood worm disinfestation, can be claimed to be the finest in the North of England. Arrangements exist whereby outside Authorities can take advantage of this plant; quite a number do so but its capacity is such that it can take more. In these days of strict economy, it is of great importance to be able to treat successfully, and thereby salvage, infested materials, especially textiles and timber, which in the past would have been considered irretrievable and condemned for destruction. The advent of modern synthetic insecticides and the intelligent use of controlled hydrogen cyanide fumigation have a considerable economic value.

Verminous Persons.—The treatment centre at Kidacre Street is equipped to treat all types of verminous conditions of the human body and is supervised by a State Registered Nurse.

The head clinic, for the treatment of *pediculus capitis*, can deal with three patients at the same time and the installation of a commercial type of hair dryer has speeded up the process considerably. A total of 2,489 persons, mainly school children and contacts, were given 2,585 treatments, in close collaboration with the School Medical Service. In connection with these cases, 1,919 homes were visited, advice given and arrangements made for treatment by the two visitors, both of whom are State Registered Nurses.

Three specially equipped bathrooms are available for the treatment of *pediculus corporis* and scabies. One bathroom has a movable bath and a stretcher trolley for the cleansing and treatment of the chronic sick or orthopaedic cases, which are conveyed to the Centre by ambulance. Cases of *pediculus corporis* numbered 282 and by far the greater proportion of these were vagrants. In all cases where it was possible to ascertain the home address or common lodging house of the person concerned, contacts were treated and personal and bed clothing subjected to steam disinfection. In connection with the National Assistance Act, 1948, Section 47, an increasing number of persons in need of care and attention, usually in a dirty and verminous condition, were cleansed and disinfested before their admission to hospital or to South Lodge, under the care of the Welfare Services Committee. By arrangement with the latter, their homes were visited, the contents sprayed *in situ*, bedding removed for steam disinfection and returned. In the majority of cases, however, the contents of the house, in a filthy condition and verminous, were removed to the H.C.N. plant at Stanley Road. After treatment the contents were sent, on the instructions of the Welfare Service Officer, to the sale rooms for disposal by auction. In all cases the verminous houses were disinfested by insecticidal spray.

Disinfection in connection with Infectious Diseases.—Routine disinfection after the more common infectious diseases was discontinued some years ago, but this service is still available on request. By far the greater number of disinfections carried out was for cases of tuberculosis, either where a patient has gone to a sanatorium or he and his family had been re-housed, or a death from the disease had occurred. Including these and all other causes, 729 houses were visited, 256 rooms were disinfected by formaldehyde, 2,081 beds and 16,175 articles were disinfected by steam. Additional visits were made at the request of the Chest Clinic in connection with the loan of medical requisites or for the distribution of bedsteads complete with or without bedding to tuberculous patients. For these purposes 76 houses were visited and 220 articles which had been on loan were disinfected before return to store for further use. For other local authorities 78 articles were disinfected by steam.

Steam disinfection was confined to three high pressure steam disinfectors at the Stanley Road Centre.

The new procedure adopted in the previous year of using portable flame throwers for burning contaminated wall and floor

surfaces, followed by the application of fresh chloride of lime, as part disinfection following anthrax outbreaks was continued successfully; no further incidents were experienced at the places of occurrence.

Other Work.—During the year 8,986 throat swabs, for adults and babies, were prepared at the Disinfestation Centre for distribution to general medical practitioners and supplied to the order of the Regional Hospital Board.

Under the Medical Requisites Loan Scheme, the Section undertook the collection and delivery of invalid chairs and spinal carriages which are housed at the Stanley Road Centre. During the year 212 visits were made and each chair and carriage was thoroughly cleansed and disinfected, inspected and repaired where necessary before delivery.

The scheme for the distribution of food supplements (cod liver oil, orange juice and National Dried Milk) and stores to infant welfare centres and day nurseries was continued during the year. One stores van was maintained for this service and completed 7,708 miles.

Flushing Services.—Three squads, each consisting of two men and equipped with a motor vehicle carrying suitable flushing and cleansing appliances, paid 22,404 visits to the city's 54 public conveniences, both male and female, with the exception of those which are staffed by attendants. About 75 per cent. of the conveniences are cleansed each week-day and, in addition, those situated in the centre of the city are cleansed on Sundays; the remainder are visited on alternate days. At the same time these men reported structural and other damage, caused wilfully or by wear and constant use, and this information was passed on to the Chief Sanitary Inspector's Section for action.

The service was also extended for the cleansing of drains of private dwellings, schools and factories, on request from and at the cost of the owners.

A fourth squad was solely employed for the cleansing of public sewers, for the removal of stoppages and drain testing under the direction of sanitary inspectors. This service was commenced during the previous year as an experiment but it has proved so necessary in view of the urgency of cleansing public sewers and in the diagnosis of defective drains, that the work carried out during the eight months of 1950 has almost doubled during 1951. Thus 245 public sewers were dealt with and 6,320 private drains were tested and/or cleansed.



ANTHRAX

Disinfection of yard surface using portable flame throwers followed by application of chloride of lime.

Ring Worm Diagnosis.—Working in close co-operation with Dr. la Touche of the Department of Dermatology in the Leeds General Infirmary and Lecturer in Medical Mycology, University of Leeds, who notified to the Section addresses of cases thought to be due to infection by ringworm of animal origin, 37 homes were visited and a total of 29 cats and 16 dogs collected. These were brought to the Stanley Road Centre and examined by the staff using ultra-violet light through a Wood's glass in a dark room ; 7 cats and 2 dogs were diagnosed positive ringworm and in each case the animal was sent to Dr. la Touche for further investigations. At the same time the Chief Sanitary Inspector was informed of the results of the examinations and the animals showing a negative result were returned to their owners.

SUMMARY OF WORK CARRIED OUT BY THE DISINFESTATION AND DISINFECTION SECTION DURING 1951.

I. DISINFESTATION IN CONNECTION WITH VERMINOUS PREMISES AT THE REQUEST OF THE HOUSING DEPARTMENT				
(a) No. of houses disinfested		229		
(b) No. of removals completed		406		
(c) No. of articles disinfested by H.C.N.		23,577		
(d) No. of articles disinfested by steam		8,336		
(e) No. of houses concerned in (c) and (d)		635		
DISINFESTATION OF PRIVATE HOUSES OTHER THAN CORPORATION PROPERTY				
(f) No. of houses disinfested		642		
(g) No. of articles disinfested by H.C.N.		4,239		
(h) No. of articles disinfested by steam		1,858		
(i) No. of houses (including 2 hotels) concerned ..		827		
2. TREATMENT OF VERMINOUS PERSONS				
(a) Pediculus Corporis				
No. of cases visited		23		
No. of baths provided		282		
(b) Pediculus Capitis				
No. of cases visited		1,919		
No. of persons treated		2,489		
No. of treatments involved		2,585		
(c) Scabies				
No. of cases visited		92		
No. of persons treated		94		
No. of contacts treated		79		
No. of re-infections		4		
No. of voluntary notifications from doctors ..		31		

SUMMARY OF WORK CARRIED OUT BY THE DISINFESTATION AND
DISINFECTION SECTION DURING 1951—Continued.

3. DISINFECTION IN CONNECTION WITH INFECTIOUS DISEASES					
(a) No of houses visited .. .. .. ..	..	..	..	..	729
(b) No. of rooms disinfected by Formaldehyde .. .. .. ..	..	..	..	..	756
(c) No. of beds disinfected by Steam .. .. .. ..	..	..	..	..	2,081
(d) No. of articles disinfected by Steam .. .. .. ..	..	..	..	..	16,175
WORK FOR OTHER AUTHORITIES					
(e) No. of articles disinfected by steam .. .. .. ..	..	..	..	..	78
(f) No. of miles run .. .. .. ..	..	..	..	..	314
4. PUBLIC SEWERS					
(a) No. of public sewers cleansed .. .. .. ..	..	..	..	..	245
(b) No. of private drains tested and cleansed .. .. .. ..	..	..	..	..	6,320
5. PUBLIC CONVENiences					
(a) No. of visits paid to public conveniences, male and female, for cleansing purposes .. .. .. ..	..	..	..	..	22,404
(b) No. of drains flushed .. .. .. ..	..	..	..	..	33,967
(c) No. of W.C.'s. flushed .. .. .. ..	..	..	..	..	21,689
6. MEDICAL LOAN SCHEME					
Visits made for collection and delivery of invalid chairs and spinal carriages .. .. .. ..	..	..	..	..	212
7. DELIVERY SERVICES					
Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of Dried Milk and Stores .. .. .. .. .. .. ..	..	..	..	..	7,708
8. PREPARATION OF THROAT SWABS					
No. of swabs prepared .. .. .. .. .. ..	..	..	..	..	8,986
9. CHEST CLINIC					
(a) No. of houses visited .. .. .. ..	..	..	..	..	76
(b) No. of bedsteads delivered .. .. .. ..	..	..	..	..	43
(c) No. of beds delivered .. .. .. ..	..	..	..	..	53
(d) No. of bedding articles delivered .. .. .. ..	..	..	..	..	319
(e) No. of articles disinfected by steam .. .. .. ..	..	..	..	..	220

Maternity and Child Welfare.

MATERNITY AND CHILD WELFARE SERVICES

BY

C. M. GRAY, M.B., Ch.B., D.P.H., *Assistant Medical Officer of Health for Maternity and Child Welfare*

NATIONAL HEALTH SERVICE ACT, 1946.**SECTION 22.—CARE OF MOTHERS AND YOUNG CHILDREN.**

Maternity and Child Welfare Centres.—The numbers of mothers and children attending the clinics and the total number of attendances at all clinics were fewer during the year ending 31st December, 1951, than in 1950. This may be accounted for partly by the decline in the number of births during 1951 and also, at the ante-natal and post-natal clinics, by the fact that more mothers come under the care of their private doctor for maternity medical services.

Ante-Natal Clinics.—By 31st December, 1951, there were 191 ante-natal sessions held per month at 22 clinics. The number of expectant mothers attending the clinics during the year was 9,377, a decrease of 203 on the number for 1950. Of this total 6,397 were new cases. The total number of attendances at all clinics was 32,623 or 747 fewer than in 1950. The proportion of mothers attending the clinics who apply for hospital confinement on social grounds is still high.

Post-Natal Clinics.—There have been 26 post-natal sessions per month held at 10 clinics. The number of mothers who attended was 891 with a total number of attendances of 1,199. These figures show a decrease of 277 and 186 respectively on the numbers for 1950, but the decrease in both numbers attending and the total attendances is less than between 1949 and 1950.

Infant Clinics.—During the year an additional clinic was begun in the Farnley District, making 24 clinics in operation by the end of the year, at which 184 sessions were held per month. The number of infants under one year attending the clinics for the first time was 5,474; between one and two years 226, and between two and five years 886. These figures show a decrease of only 175 infants under one year and of 5 children between one and five years. This decrease is less than that between 1949 and 1950. The total number of children on the register at all clinics on 31st December, 1950, was

13,267 and on 31st December, 1951, with 6,586 new children registered, 6,809 names removed of children who were 5 years old, had defaulted, died or left the district, the total was 13,044.

Ministry of Health Survey.—This special survey on the growth of children begun at the infant welfare clinics in 1949 has continued. It was intended to complete the survey at the end of the second year but the Ministry has been very well satisfied with the results so far and has asked for continuation for the third year.

Welfare Foods.—National Dried Milk for infants and vitamin preparations for expectant and nursing mothers and children under five years were still supplied at the clinics. The potential take-up of orange juice was 30·0 per cent., of cod liver oil 28·8 per cent., of Vitamins A and D tablets 40·9 per cent. The comparative figures for 1950 were 30·9 per cent., 29·9 per cent. and 39·9 per cent. These results, especially for the take-up of cod liver oil, are not so satisfactory as they should be.

Educational Work.—Short talks to the mothers have been given by the health visitors on various subjects dealing with the health of the expectant and nursing mother and the care of the young child. With valuable assistance from the voluntary workers, special efforts have been made in the cause of "Safety in the Home" trying to point out to the mothers how to avoid accidents in the home.

Members of the Leeds Babies' Welcome Association continued their regular help in the clinics as voluntary workers ; assisting with routine clerical work ; in some clinics organising play corners for toddlers ; being responsible for the sale of knitting wool and baby clothes and also fireguards ; organising a series of talks and discussions for groups of mothers and at all times helping to maintain a friendly atmosphere in the clinics.

Consultative Infant Clinics.—The arrangements with the University of Leeds Department of Pædiatrics and Child Health continued and consultative infant clinics were held each month at three infant welfare centres. The total number of attendances of children under five years was 165, a decrease of 8 on the number in 1950.

Physiotherapy.—The number of children referred during the year for examination by the Orthopædic Consultant was 118, a decrease of 63 on the number referred in 1950. Four cases only required to be referred for hospital treatment.

Artificial Sunlight.—This was given to 978 children during the year and the total number of attendances at the six infant welfare centres was 15,995. These figures show an increase of 78 in the number of children attending, but a decrease of 997 in the total attendances, compared with those for 1950. This would seem to indicate that the children attending required a shorter course of sunlight to obtain satisfactory results.

Remedial Exercises.—A total of 560 children attended for exercises with 5,469 attendances, a decrease of 30 and 303 respectively on the numbers for 1950.

Ante-Natal and Post-Natal Classes.—These exercise classes for expectant and nursing mothers continued to be held at four welfare centres and at Wyther Hostel, but were interrupted for a period during the year owing to shortage of staff. There were 146 mothers who attended ante-natal classes and 36 attended for post-natal exercises. The total number of attendances was 516 and 141 respectively.

Dental Care.—See report of Senior Dental Officer on page 64.

Eye Defects.—*Children classified as blind or partially blind.*—There were 9 children under five years on the register on 31st December, 1950. During the year 4 children were notified as blind; of these, 1 died, leaving 12 names on the register on 31st December, 1951. Two of these children had previously been admitted to Sunshine Homes, a third child was admitted during 1951 and application was made for the admission of two children.

Arrangements have now been made for any child under five years attending the infant welfare clinics who is found to have a squint or other eye defect, to be referred to the Ophthalmic Consultant at the school clinic. It is hoped by this means to provide continuity of treatment for such cases.

Care of Premature Infants.—Between 1st January, 1951, and 31st December, 1951, there were 676 live births notified of infants weighing $5\frac{1}{2}$ lbs. or less at birth. Of these, 535 were born in hospital or nursing homes in the city and 141 were born at home. The number of those born at home who were removed to hospital was 29 and the remaining 112 were nursed at home.

The number of infants who died within 24 hours of birth was 52; of these, 9 were born at home and 43 in hospital or nursing home. The number who died between one day and one month of birth was 42; of these, 6 were born at home and 36 in hospital or nursing home.

Of the 112 infants nursed at home, 42 received special nursing care by the premature baby nurses.

As well as nursing those infants born at home, the special nurses undertook the after-care of 207 infants requiring further nursing care after discharge from the Leeds Maternity Hospital, St. James's and St. Mary's Hospitals.

During the year arrangements were made for the three premature baby nurses to attend a refresher course at Newcastle-on-Tyne, in the domiciliary care of the premature baby.

Wyther Hostel (Mother and Baby Home).—On 31st December, 1950, there were 18 mothers and 16 infants in the home. During the year 59 mothers and 48 infants were admitted; of these, 42 mothers were admitted for ante-natal care. The comparative figures for 1950 were 64 mothers and 58 infants, 45 of these mothers being admitted for ante-natal care.

Those discharged during 1951 were 60 mothers and 49 infants. Of these, 26 mothers were able to keep their babies, 21 babies were placed with a view to adoption through the Care of Children Department and 2 babies were admitted to residential nurseries. There were 11 mothers discharged home or to hospital before the birth of the baby who were not re-admitted.

All cases of girls expecting illegitimate babies attending the ante-natal clinics are referred to the Social Worker for investigation. Arrangements are made by her when necessary for admission to Wyther Hostel or to a home run by voluntary agencies. After-care is also carried out in cases where this is possible.

Convalescence.—During 1951 it was possible to send for convalescence only two mothers and one child under five years who were referred from the maternity and child welfare clinics.

Day Nurseries.—The demand for the admission of children to day nurseries was still great during 1951 and there was a very considerable waiting list of children for admission to all nurseries. It has been possible to admit only those children classed as priority cases according to social or economic circumstances necessitating the mother going to work, or in a small number of cases where the mother was dead or had deserted the family. A few special cases have been admitted on medical grounds. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular full-time employment.

The following table gives details of the accommodation and attendances at the day nurseries during the year.

DAY NURSERIES

Name of Nursery.	No. of Places	Average attendance per 5 day week	Total Number Attendances
East Street ..	35	27·3	6,986
Sheepscar ..	35	28·1	7,180
Quarry Hill ..	35	29·4	7,533
Blenheim ..	50	39·4	10,018
Harehills ..	50	35·4	9,040
Hunslet Hall ..	50	41·4	10,447
Armley ..	55	43·6	11,265
Bramley ..	55	37·6	9,460
Low Road ..	55	39·9	10,142
Middleton ..	55	40·6	10,194
Meanwood ..	55	43·8	11,045
Rookwood ..	55	43·9	11,180
Crossgates ..	70	47·9	12,086
York Road ..	70	58·7	14,877
Burley Park ..	75	58·4	14,875
Total ..	800	615·4 = 76·9%	156,328

Adoption Act, 1950.—The liaison between the Care of Children Department and the Health Department has been maintained. Notice is received of all children under five years placed with a view to adoption through the Children's Officer and the health visitor visits the child in the home of the prospective adopter each month. A report is sent to the Children's Officer on the care and progress of the child.

Medical examination of the children is carried out at the infant welfare clinic and blood tests are taken prior to the child being placed for adoption.

In this connection 57 mothers and 64 children had blood tests carried out at the Central Clinic. The comparative figures for 1950 were 58 and 74 respectively.

Nurseries and Child Minders Act, 1948.—Under this Act applications were received during the year from 16 persons for registration as child minders.

The following table shows the number of registered daily minders, the number of registered nurseries and the permitted number of children minded.

NURSERIES AND CHILD MINDERS ACT, 1948.

	Child Minders	Nurseries
No. on register at 31st December, 1950	23	4
Permitted No. of children at 31st Dec- ember, 1950	94	92
No. registered during the year	14	..
No. of applications refused	2	..
No. of registrations cancelled	5	1
No. on register at 31st December, 1951 ..	32	3
Permitted No. of children at 31st Dec- ember, 1951	152	72

SECTION 23.—MIDWIFERY.—Although the demand for hospital accommodation for confinement is still great, it is gratifying to note that the figures for 1951 show a relative increase in the number of women attended in their own homes by domiciliary midwives.

There is very good co-operation between the private doctor and the midwife. The scheme whereby the midwife ensures that the patient has booked a doctor for maternity medical services is working satisfactorily. This arrangement prevents the doctor being called in to an emergency knowing nothing of the patient and such cases are now a comparatively rare occurrence. Even when the doctor is himself responsible for the ante-natal supervision of the patient, increasing use is made of the Local Health Authority clinics, patients being referred for blood tests to be carried out and to take advantage of other facilities such as ante-natal exercise classes available at the clinics.

Midwifery Training, Part II.—The training school at Redcourt Hostel is becoming increasingly well known, as is shown by the number of applicants from Part I training schools in different parts of the country. The fact that the whole of the six months' training is taken in district work is found by the pupil midwives to give them greater experience in normal midwifery and a wider knowledge of social conditions. This is particularly valuable to the midwife who intends to practise district midwifery.

The training course is under the supervision of the midwifery tutor who is superintendent of the training school. A number of the domiciliary midwives have been approved by the Central Midwives Board as teachers of pupil midwives and work in close liaison with the midwifery tutor. They instruct the pupils in their practical work, each midwife being responsible for training one or two pupil midwives. On 31st December, 1951, there were 22 approved teacher-midwives.

During the year 42 pupil midwives completed their training. Of these, 41 passed the Part II examination of the Central Midwives Board and 1 failed to pass. On 31st December, 1951, there were 23 pupil midwives in training.

Notified Births.—The total number of births of Leeds cases during the year was 8,243. Of these, 5,613 or 68·1 per cent. took place in hospitals or nursing homes and 2,553 or 31·0 per cent. took place at home. The comparative figures for 1950 were :—hospital cases 72·1 per cent. and home confinements 27·8 per cent. During 1951 there were 77 cases or 0·9 per cent. of the notified births attended by ambulance midwives.

The number of domiciliary births notified by midwives acting as midwives was 2,274 or 89·1 per cent. of the total domiciliary births.

Miss D. Humphreys, Lay Supervisor of Midwives, reports :—

Notification of intention of practise.—The number of midwives who notified their intention to practise as midwives during the year was 191, of whom 6 left the district, 4 ceased to practise and 2 retired, leaving 179 midwives practising in the city on 31st December, 1951. Of these, 93 were employed in hospitals, 21 in private nursing homes, 8 as private midwives and 57 were employed by the Local Authority.

Only 5 midwives notified their intention to practise as maternity nurses during the year.

Domiciliary Midwifery Service.—The average number of midwives employed by the Local Health Authority in domiciliary work throughout the year was 47. Four midwives left the service. One midwife retired as did one-part time midwife. On 31st December, 1951, there were 48 domiciliary midwives, including the three midwives undertaking the nursing care of premature babies.

The number of domiciliary births attended by municipal midwives during the year was 2,513 or 30·5 per cent. of the total births notified in the city. The comparative figures for 1950 were 2,231 or 24·4 per cent.

The following table gives comparative figures for the work done by the domiciliary midwives during 1950 and 1951.

	1950	1951
Ante-natal visits	18,381	18,671
Attendance at birth { As midwife ..	1,977	2,257
As maternity nurse ..	254	256
Post-natal visits	44,697	51,752
Bookings { As midwife	1,350	1,974
As maternity nurse	825	808
Attendances by patients { At midwife's clinic	9,769	13,361
At midwife's home	6,668	6,354
No. of patients who had Gas/Air analgesia	1,817	2,198

Of the 51,752 post-natal visits paid in 1951, 608 were to patients discharged home from hospital before the 14th day of the puerperium.

Analgesia.—All municipal midwives are qualified to administer gas/air analgesia and 40 sets of apparatus are available for their use. Every expectant mother who books the services of a municipal midwife is given the opportunity of having this analgesia at her confinement unless she is medically unfit or her doctor prefers another form of analgesia. Of the 2,513 patients attended at home by municipal midwives, 2,198 or 87·5 per cent. were given gas/air analgesia compared with 1,187 or 81·4 per cent. in 1950.

Maternity Outfits.—A sterilised and sealed packet containing all dressings required at the confinement as specified by the Ministry of Health is provided by the Local Health Authority for every case attended by a municipal midwife. Outfits are also available for domiciliary confinements attended by private midwives or maternity nurses and may be obtained at the maternity and child welfare clinics. During 1951, 22 outfits were supplied in this way.

Medical Assistance.—During the year, 611 notifications were received of having called in medical assistance for domiciliary midwifery cases where a doctor was booked for maternity medical services. There were 41 notifications for emergencies under Section 14 of the Midwives Act, 1918, but only 28 claims for attendance were received from medical practitioners.

Supervision of Midwives.—The domiciliary municipal midwives were interviewed each week at the Health Department by the Lay Supervisor. The Supervisor made 306 visits of inspection to the midwives in their homes and at their cases, and in addition paid 229 special visits.

SECTION 24.—HEALTH VISITING.—*Miss M. Burke, Superintendent Health Visitor, reports:*—The health visitor is becoming more fully recognised as the medico-social worker in the home. The enlarged field of her work makes greater demands upon her and much more of her time is spent in dealing with special cases at the request of general practitioners and hospital consultants. A satisfactory working liaison has been established between health visitors and hospital almoners.

During the year many visits have been made by health visitors to investigate cases of overcrowding and bad housing. Some are cases of problem families where no effort is made to overcome social difficulties. Children in these families are found to be suffering from some degree of neglect and certain cases have been reported to the Committee set up to investigate cases of children neglected in their homes, others have been referred to the National Society for the Prevention of Cruelty to Children, the health visitor working in close co-operation with the Society's inspector.

The health visitors have continued to emphasise to mothers of young babies the importance of vaccination, and immunisation against diphtheria. Since it has been possible also to offer immunisation against whooping cough the health visitors have found many mothers anxious to have their children protected.

Arrangements have continued throughout the year for medical, social science and health visitor students to visit with the health visitor on her district.

At nine of the maternity and child welfare centres the health visitors work from the centre. At two centres combined duties of health visitor and school nurse are carried out.

By arrangement with the Children's Officer, children under five years placed with a view to adoption are visited by a health visitor each month. Monthly visits are also paid to children in the care of registered daily minders.

One health visitor was permitted leave of absence during the year to carry out an exchange visit with a public health nurse in New Zealand; the New Zealand nurse became a temporary member of the health visiting staff. This proved a most interesting experience to the nurses concerned and also to other members of the staff.

The total number of visits paid by the health visitors during 1951 was 163,534, an increase of 25,748 on the total number of visits paid in 1950.

The following table gives details of the work done and visits paid :—

					VISITS
Notified births including re-visits	..	..	..	..	137,177
Stillbirths	..	..	..	..	185
Investigations into deaths of children under five years					239
Ophthalmia Neonatorum	..	..	..	..	25
Expectant mothers	..	..	..	..	3,400
Infectious diseases	..	..	..	..	349
Cases discharged from hospital	..	..	..	..	304
Home Help investigations	..	..	..	..	70
Child Minders	..	..	..	..	222
Day Nursery admissions and absentees			..	..	1,068
Adoption visits	..	..	..	..	408
Unclassified special visits	2,040
Ineffectual visits	18,047
<hr/>					
Total visits for the year			<u>163,534</u>
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Nurses Act, 1943, Part II.—Agencies for the supply of Nurses.—Under this Act only one nursing agency applied for registration in 1951 and a licence was issued.

Registered Nursing Homes.—The following table gives particulars of registered nursing homes in the city :—

REGISTERED NURSING HOMES IN THE CITY.

	Maternity		Maternity and General.		General.		Total.			
	Homes.	Beds.	Homes.	Beds.		Homes.	Beds.	Homes.	Beds.	
				Mat'y.	Gen.					
Existing at 31st Dec., 1950 ..	8	89	3	12	47	8	108	19	101	155
Registration approved during 1951 ..	..	..	..	..	..	1	21	1	..	21
Registration cancelled or surrendered during 1951 ..	2	15	2	10	15	1	24	5	25	39
Existing at 31st Dec., 1951 ..	6	74	1	2	32	8	105	15	76	137

DENTAL CARE OF MOTHERS AND YOUNG CHILDREN

BY

D. E. TAYLOR, L.D.S.
Senior Dental Officer

It is gratifying to note that although there was a reduction in the number of sessions spent on dental service to mothers compared with the previous year, the number of teeth filled increased from 844 to 970. At the same time there was a decrease in the number of teeth extracted from 2,312 to 1,693. This bears out what was the general opinion during inspections that mothers who attend have healthier mouths and fewer unsavable teeth than in the past.

The weakness of the present system is that only the patients who are interested present themselves for inspection. No doubt many of the others attend their own dentists at regular intervals but it is very probable that many only have treatment for the relief of pain. Since it is this type of mother who would benefit most from the service it is hoped that when more dentists are available it will be possible to arrange that a dental examination be given to all as part of the maternity service.

During the year an Oral Hygienist was appointed. These ancillary workers are trained under the auspices of the Ministries of Health and Education and their employment at present is an experiment to ascertain the value of such a service. Their duties consist of scaling and cleaning the teeth and giving instructions in how to maintain a clean and healthy mouth. There is a great need for work of this kind as many of the mothers with sound teeth lose them prematurely through disease of the gums due, in the majority of cases, to the neglect of oral hygiene. It is hoped to extend this service so that all mothers will be given an opportunity to learn the proper care of the mouth. Not only will this be of great benefit to themselves but they will be better able to instruct their children.

The laboratory, which is a joint establishment supplying dentures and appliances for school children as well as the maternity service, made 346 dentures for mothers during the year. The patients for dentures attend Park Square Clinic owing to its proximity to the workroom.

While it is not yet possible to give routine inspection and treatment to pre-school children they can be attended to at the dental clinics at the sessions set aside for urgent treatment of school children when advice or treatment can be given. Mothers should take the children to the clinic nearest their homes on these sessions. No previous appointment is necessary.

Professor T. Talmage Read, Consultant Oral Surgeon, gave advice on the treatment of difficult cases and performed, where necessary, the surgical operations.

NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers	1,825	1,208	751	600
Children under 5 years ..	..	..	169	..

FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions	1,693	297
Anæsthetics :—		
Local	272	..
General	313	169
Fillings	970	..
Scalings or scaling and Gum Treatment ..	567*	..
Silver Nitrate Treatment .. .. .. .. ..	..	..
Dressings .. .. .. .. ..	..	..
Radiographs	35	..
Denture provided :—		
Complete	217	..
Partial	129	..

*Including 489 by Oral Hygienist

		Expectant Mothers	Nursing Mothers
No. of inspection invitations	.. ..	5,965	3
No. of inspection attendances	.. ..	1,824	1
No. found dentally fit ..	.. ..	474	..
No. accepted treatment ..	.. ..	1,208	..
No. refused treatment ..	.. ..	142	1
Total No. of teeth filled	.. ..	861	35
Type of filling given :—			
Synthetic porcelain	.. ..	235	22
Cement	.. ..	33	3
Amalgam	.. ..	61	..
Lined Amalgam	.. ..	605	11
Total fillings given	.. ..	934	36
Total No. of teeth extracted	.. ..	1,570	123
" " persons fitted with dentures	.. ..	93	128
" " scalings	.. ..	70	8
" " other treatments	.. ..	83	23
" " local anaesthetics	.. ..	237	35
" " general anaesthetics	.. ..	294	19
" " treatment sessions	.. ..	399	..
" " inspection sessions	.. ..	75	..
" " individuals treated	.. ..	551	200
" " attendances for treatment	.. ..	1,577	603
" " persons made dentally fit	.. ..	473	127

WORK OF ORAL HYGIENIST

		Expectant Mothers	Nursing Mothers
No. of attendances	.. ..	489	36
" " scalings	.. ..	489	36
" " treatment sessions	.. ..	170	..
" " made dentally fit	.. ..	91	6
" " individuals treated	.. ..	174	34

Mental Health Services

MENTAL HEALTH SERVICES

J. M. McALPIN, M.B., Ch.B.
Medical Officer for Mental Health Services

J. SQUIRE HOYLE
Executive Officer

ADMINISTRATION

Constitution of Committee.—The city's Mental Health Service is administered by a Sub-Committee of the Health Committee. This Sub-Committee has recently been re-named the Sub-Health (Special Services) Committee and consists of twelve elected members of the Council and three co-opted members; meetings are held monthly when reports are submitted on individual cases of mental ill-health dealt with during the preceding month, together with statistical tables and other business.

Staffing.—The approved establishment of the Department is shown in the following table.

WHOLE-TIME MEDICAL AND LAY ESTABLISHMENT.

The Medical Superintendents of the local Mental Hospital and Mental Deficiency Institution have continued to act as Consultants to the Service. The vacant post of Medical Officer for Mental Health has been filled during the year by the appointment of Dr. J. M. McAlpin, who commenced duties in April. Mental Health Workers have various degrees of qualification for their posts, i.e. Psychiatric Social Worker Diploma, State Registered Nurse, R.M.P. Certificate and also a long and valued field experience.

Co-ordination with other Bodies.—Co-operation has been maintained with the Regional Hospital Board, the Hospital Management Committees, the University Department of Psychiatry and other kindred bodies. It is pleasing to note that this liaison is particularly active in this area and the Medical Officer takes weekly sessions at St. James's Hospital.

Voluntary Associations.—As the Department is now staffed by trained personnel no duties are delegated to a voluntary organisation but close contact is maintained with the National Association for Mental Health, who have four representatives from the city and grants are made to this Association. The Medical Officer is a member of the Executive Committee of the Marriage Guidance Council which receives a grant made under Section 136 of the Local Government Act, 1948.

Training of Staff.—New staff have continued to be trained in the Department and assistants at occupation centres have been trained by the supervisors, most of whom have had long and varied practical experience. Senior officers and mental health workers have given lectures and talks to Social Service students and Health Visitors, and sessions have been arranged for students at the various Centres. It is hoped that eventually a training course for mental health workers will be established in Leeds. Much routine work in mental health is done by officers without the comprehensive training of the psychiatric social worker and for these officers and for new entrants to the work, a short academic course would be of great value. Leeds, with a University Chair of Psychiatry and a comprehensive Mental Health Service, offers wide opportunities for training in both theory and practice.

WORK UNDERTAKEN IN THE COMMUNITY

Prevention, Care and After-Care.—The Local Health Authority has continued to provide prevention, care and after-care services under Section 28 of the National Health Service Act. Propaganda

work has been done locally by lectures and film shows to various interested bodies. Representatives of other local authorities and several workers in the mental health field from overseas have visited Leeds to study the working of the Service and the friendly exchange of opinions and criticisms has proved both valuable and stimulating.

"Mountside" has continued as a centre for psychiatric social work. In addition to serving as headquarters for preventive services and after-care for psychiatric cases, this building houses the Day Centre and Therapeutic Social Club. The average daily attendance at the Day Centre was seven. Following a discussion with the Medical Superintendents of the Mental Hospitals and the Consultant Psychiatrist to St. James's Hospital, there was an increase in the number of patients referred and the average daily attendance over the last four months of the year was ten. Three patients who would otherwise have been unemployable have been granted vacancies at the Remploy Factory and the manager reports favourably on their progress. Twelve patients who have undergone a course of rehabilitation at the Centre have returned to full employment during the year.

The Therapeutic Social Club had fifty meetings during the year with an average attendance of twenty-two. Handicrafts sessions were held on 82 evenings during the year, the average attendance being twelve. The Club continues to function on democratic self-governing lines with frequent changes of Chairman and office-bearers in order to give as many members as possible an opportunity of undertaking responsibility. The Table Tennis Section entered for the competitions of the Leeds Table Tennis League and this has not only stimulated interest in the game but has been of great social value in enlarging the members' circle of acquaintances and developing their self-confidence in company.

Group therapy sessions were held on one afternoon weekly and were attended by a small number of patients requiring more intensive support and encouragement. This was begun as an experimental venture and the results have been encouraging.

After-Care Work.—The total number of new cases referred for after-care through the year was 292. The Psychiatric Social Worker and mental health workers undertake social work at the Psychiatric Unit at St. James's Hospital and during the year compiled social reports on 50 in-patients and 85 out-patients. Patients come to recognise the mental health workers as essential members of the team while they are under treatment and are ready to accept their

guidance and assistance when the treatment is over. Good after-care is essential both to prevent relapse and to assist the patient to re-adjust himself to life in the community.

Family Consultation Service.—Twenty-seven cases were referred to the Consultant Service by general practitioners and were given advice by the Medical Officer or Psychiatric Social Worker. With the expansion of out-patient facilities at St. James's Hospital a smaller number of cases is being referred to this Service and the emphasis is more on the social aspects of mental instability rather than acting as a clearing house for patients requiring hospital or out-patient treatment. Increasing use of this service is being made by other social agencies and many patients are seen and advised who would be unwilling to attend the Psychiatric Out-Patient Clinic.

Lunacy and Mental Treatment Acts, 1890-1930.—The following table summarises the monthly reports to the Committee of work carried out by the mental health workers.

CASES DEALT WITH BY AUTHORISED OFFICERS

	Males	Females	Total
1. Visits paid	535	881	1,416
2. Removed to St. James's Hospital under Section 20 of the Lunacy Act, 1890 ..	255	306	561
3. Certified patients transferred to Menston Hospital	75	82	157
4. Certified patients transferred to Stanley Royd Hospital, Wakefield .. ..	..	39	39
5. Certified patients transferred to Storthes Hall Hospital	3	1	4
6. Certified patients transferred to other Mental Hospitals	6	38	44
7. Direct admissions to Mental Hospitals (certified) .. .. .. ..	..	3	3
8. Total Mental Hospital admissions on Summary Reception Orders or Petition	84	163	247
9. Patients admitted to St. James's Hospital under Section 20 and transferred to Voluntary	52	33	85
10. Voluntary patients admitted to Mental Hospitals direct	28	43	71
11. Voluntary patients admitted to Mental Hospitals on transfer from St. James's Hospital	19	13	32
12. Total voluntary patients	99	89	188
13. Temporary patients admitted to Mental Hospitals (all via St. James's Hospital)	2	2	4
14. Total admissions to Mental Hospitals (Total of Items 8, 9, 10, 11 and 13) ..	101	91	192

NUMBER OF LEEDS CASES IN HOSPITALS.

	Menston			Stanley Royd			Storthes Hall		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
On books 1.4.51 ..	388	433	821	244	496	740	19	47	66
Admitted during 1951-1952 ..	87	83	170	1	55	56	5	1	6
Deaths and discharges ..	475	516	991	245	551	796	24	48	72
Remaining on books 1.4.52 ..	66	91	157	12	58	70	3	3	6
	409	425	834	233	493	726	21	45	66

Mental Deficiency Acts, 1913-1930.—The following return, which is on similar lines to those submitted to the Ministry of Health, shows the number of mental defectives reported and how they have been dealt with.

PARTICULARS OF MENTAL DEFECTIVES ASCERTAINED DURING 1951.

		Males	Females	Total
1. Ascertainment.				
(a) Cases reported by Local Education Authority (Section 57, Education Act, 1944) :—				
(i) Ineducable children	30	14	44	
(ii) At 15 years—on leaving Special School	31	34	65	
(b) Other cases reported during 1951 and ascertained to be "subject to be dealt with"	8	5	13	
(c) Other cases reported during 1951 who are not at present "subject to be dealt with" but for whom the Local Health Authority may subsequently become liable	22	11	33	
Total number of cases reported during the year	91	64	155	
2. Disposal of cases reported during the year.				
(a) Cases ascertained to be "subject to be dealt with":—				
(i) Placed under Statutory Supervision	60	48	108	
(ii) Placed under Guardianship (by Order) .. . .	..	..	..
(iii) Admitted to Institutions (by Order)	6	4	10	
(iv) Taken to "Places of Safety"	2	1	3	
(v) Died or removed from area	1	..	1	
(vi) Action not yet taken .. . .	..	..	..
(b) Cases not at present "subject to be dealt with":—				
(i) Placed under Voluntary Supervision	21	11	32	
(ii) Action not yet taken .. . .	..	..	..
(iii) Action unnecessary	1	..	1	
Totals	91	64	155	

PARTICULARS OF LEEDS MENTAL DEFECTIVES ON 1ST JANUARY, 1952.

		Males	Females	Total
1.	" Subject to be dealt with " :—			
	(a) Under Statutory Supervision ..	388	326	714
	(b) Under Guardianship ..	15	19	34
	(c) In certified Institutions ..	495	455	950
	(d) In " Places of Safety " ..	4	15	19
	(e) Action not yet taken ..	..	..	..
2.	Certified defectives but not yet " subject to be dealt with " :—			
	Under Voluntary Supervision ..	45	54	99
	Totals .. .	947	869	1,816

The number of mentally defective persons in Leeds on the registers (i.e. 1,816) is equivalent to 3·6 per thousand of the city's estimated population.

Guardianship.—During the year four defectives have been placed under guardianship so that the Local Authority can provide financial assistance for the guardians concerned as they are not entitled to receive any payment from the National Assistance Board until the child is 16 years of age. The Guardianship payment will cease on that day and the case will be referred to the Assistance Board. Six cases have been transferred to Guardianship from Institution care.

Supervision.—Mental health workers have maintained supervision over the 847 cases living in the community and special cases have been seen by the Medical Officer. The practice has been continued of removing from the register old cases who have proved stable in character, thus enabling the mental health workers to devote more time to difficult cases.

A number of cases has been notified by the Education Department pursuant to Section 57 (5) of the Mental Deficiency Act, i.e. in need of a measure of supervision on leaving the schools for the educationally sub-normal. The majority of these cases find employment without difficulty and become self-supporting members of the community. Some find difficulty in settling to regular work and change their employment frequently for the first few months; much help can be given in these cases by the welfare workers, who have good contacts with employers who are able to use this kind of labour. Many delinquents are found in young people of this level of intelligence and supervision is particularly desirable when the home environment is unsatisfactory. In this connection it is pleasing to place on record the co-operation that exists between this Department and the Probation Officer.

The re-housing of families on new estates during the last few years has had a pronounced beneficial effect and of the 813 defectives under supervision, 527 or 64·8 per cent. are living under good home care ; 241 or 29·6 per cent. fair home care and 45 or 5·6 per cent. bad home care. The homes have been analysed having regard to the degree of care, comfort and cleanliness that exist, eliminating as far as possible such factors as overcrowding, old premises and slum areas, over which parents at present have little or no control.

It is satisfactory to report that for the period under review very few mental defectives of the employable type were out of work.

Ninety-nine, or 12 per cent. of the total defectives under supervision, are too defective either for occupation centres or home training ; many of them are on the waiting list for admission to institutions.

Ninety-eight, or 12 per cent., are considered to be usefully employed at home either in domestic tasks for their parents or working on small holdings, etc. Two hundred and eighty-four or 34 per cent. are employed in outside industry. The higher grade mental defective is still able to find employment in Leeds without much difficulty and there were only nine employable defectives out of work at the end of the year.

Mental health workers have made useful contacts with Welfare Officers of industrial concerns and also with the officials of the Employment Exchanges who have been invaluable in co-operating with the Mental Health Department.

The occupations followed by defectives vary but little. The larger proportion, namely 39, work in tailoring shops—basting, button-holing, etc. Twenty-nine are employed in mills—doffing, winding, bobbin ligging, feeding, etc. Thirty-five are engaged as labourers—engineering, gardening, box making, etc., and ten males are employed as drivers' mates. Twelve of the females are packing in sweet factories and box-making shops ; six are working either in resident or non-resident domestic service and fifteen in the printing trade folding. Other occupations followed by mental defectives include laundry work, tin greasing in bakehouses, porters, messengers, pickle works, pits, glass works.

Occupation Centres—The following statistical table shows the number of defectives attending occupation centres at the end of the year.

	Males	Females	Total
North Leeds Occupation Centre (adults) ..	73	..	73
South Leeds " " "	1	54	55
East Leeds " " (children) ..	62	48	110
West Leeds " " "	50	35	85
Totals	186	137	323*

*Includes 23 cases from the area of the West Riding County Council.

North Leeds Occupation Centre.—In spite of the crowded conditions under which most of the youths have to work (in one room without opportunities for grading), the Centre has done well in the occupation of lower grade youths and boys who are incapable of work and has also assisted in the training of students. The youths who are capable of a certain amount of remunerative work under sheltered conditions have been transferred to the new centre at Rutland Lodge and early in 1952 it is hoped to transfer the whole of the Centre to the new premises where work can be carried on under more suitable and roomy conditions. The boys enjoyed a trip to the seaside during the year but the week's camp previously held annually has been dispensed with owing to the preponderance of low-grade defectives who are incapable of deriving benefit therefrom. The attendance has been good and a variety of articles has been made and sold.

North Leeds Centre (Rutland Lodge).—At the close of the year arrangements were well in hand for the conversion of the Rutland Lodge "Factory-in-the-Field" premises for use as an occupation centre. Twenty-two men are already working in the firewood department of the Industry Centre and fifty-three will be transferred as soon as the building alterations are completed.

The ground floor constitutes the Manager's office, Medical Officer's consulting room, joiners' and carpenters' workshop and stores, brush-making and firewood departments. The upper floor accommodates the boot-repairing, toy-making, plastics, coir-mat making departments, etc. and there is a recreation room for the youths and a staff room. Some of the youths help the gardener. A modern kitchen and dining room is in a separate one-storey building in the grounds.

South Leeds Centre (Laundry Section).—The laundry has continued to function satisfactorily during the year and has laundered an average of five thousand articles per week. A very useful addition to the laundry has been the large recreation room on the ground floor of the adjoining occupation centre building which is shared with the latter centre. It has been suitably decorated and gives an opportunity for games and dancing which have not hitherto been enjoyed and are much appreciated. The room is also used as a dining room ; square cafe tables and cloths are provided and the meals are sent down a hoist from the kitchen above which is used jointly by the two centres. There are twenty-five girls in regular attendance, most of whom have been tried out at some time or another in situations but without success as all suffer from temperamental difficulties which cannot be appreciated by employers of labour. The attendance is good and the wages paid are from 19s. 9d. to 46s. per week, plus travelling allowance and a free mid-day meal. Visits have been made during the year to the pantomime and to the seaside.

South Leeds Occupation Centre.—This Centre was opened on 9th January, 1951, for the accommodation of women and girls over school age who are of the lower grade and incapable of employment. It is conducted more on the lines of a girls' club rather than the orthodox type of occupation centre and the ages range from seventeen to thirty years. Light domestic tasks such as dusting, table-laying and the care of cutlery are done by the girls. An informal atmosphere is maintained ; old-time dancing and table tennis are the main physical activities. Handwork consists of rug-making, knitting, simple sewing and embroidery. The percussion band plays no small part in the weekly activities and is extremely popular. One morning each week is devoted to hairdressing and manicure and an appreciable improvement has been noticed in the appearance of many of the girls. The Centre, which opened with fifteen girls, has now an average roll of twenty-nine, the majority of whom need transport. A modern kitchen has been installed with adequate staff for cooking and cleaning.

East Leeds Occupation Centre.—The year ending December, 31st, 1951, closed with 114 children on the register, comprising one class of seventeen medium-grade children and the other seven classes made up of low-grade imbecile children between 3 and 14 years.

During the year student health visitors, home teachers and social workers from several districts have spent some time in the Centre and officials from Newcastle, Stoke-on-Trent, Liverpool, Northern Ireland and Preston have also visited. Foreign visitors have also observed the work and members of the Parents' Associations of York and Stockton have visited the Centre.

The children's parents were entertained at the summer concert and the Christmas Party and Nativity Tableau and their generous support to the Harvest Festival and Bring-and-Buy Sale was much appreciated. The children enjoyed an outing during the summer to Scarthingwell Hall, near Tadcaster.

The children attended the East Leeds Clinic for treatment of minor ailments and this facility is a great help in maintaining good health and attendance, whilst the provision of door-to-door transport for the younger and physically handicapped children has made it possible to admit many children who would otherwise have required home teaching.

West Leeds Occupation Centre.—The numbers continue to increase and many spastic children are on the roll and are attended to in a special class, the activities of which are carried on under the direction of one of the Assistant School Medical Officers. There is a very active Parents' Association, which has the Supervisor for its President. The Association has, during the year, made gifts to the Centre of an 8 mm. cinema projector, walking apparatus, pram and wireless set. The Centre held three open days and a Nativity Play which were well attended by the parents. The girls' evening club, run jointly with the girls from the Laundry Centre, has lately been transferred to the recreation room at the South Leeds premises and is an improvement on the cramped quarters at the West Leeds Centre. The attendance and health of the children has been good.

Transport of Children.—Children who suffer from heart condition, spastic or crippled state, extreme low-grade condition or physical weakness or live long distances from the centres are conveyed by fourteen private cars, the cost of which is amply set off by three important situations, viz. :—

- (i) the reduction in absenteeism,
- (ii) the improved physique of the children. It has been most noticeable that since the introduction of transport there

have been less colds and chills amongst the children, whose parents have previously had to take them, with much difficulty and distress and in all weathers, for long distances by bus and tram.

(iii) the fact that under present conditions of shortage of beds the occupation centres are very largely substitutes for institutions at a saving of more than half the cost.

The car drivers, who are recruited from a voluntary pool, take an exceptionally human interest in their afflicted charges and show great care and understanding in carrying them in and out of the cars and it is evident that they have been well chosen for the task.

CONCLUSION

The Committee's plan to provide a resident hostel for ex-hospital patients has been postponed for the present, partly from inability to find suitable premises and secondly owing to the need for economy. It is hoped to bring forward the scheme at a subsequent date, together with one for a hostel for defectives who are capable of employment but who have no homes. The plan for a new occupation centre has been tentatively approved by the Ministry and negotiations are proceeding with regard to minor amendments thereto.

The Department is pleased to place on record the co-operation which has been forthcoming from Dr. Wilson, Medical Superintendent of Meanwood Park Hospital, and Dr. Willcock, Chief Assistant School Medical Officer, and their assistance has been much appreciated.

NORTH LEEDS OCCUPATION CENTRE



Handicrafts.



Brush-making Shop.

NORTH LEEDS OCCUPATION CENTRE.



Boot-repairing Shop.



Joiners' Shop.

NORTH LEEDS OCCUPATION CENTRE.



Firewood Bundling



Dining Room.

National Health Service Act 1946

Section 25 HOME NURSING

Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION

Section 27 AMBULANCE SERVICE

Section 28 PREVENTION, CARE AND AFTER-CARE

Section 29 DOMESTIC HELP

SECTION 25

HOME NURSING

The Home Nursing Service in Leeds is provided partly under agency arrangements with the Joint District Nursing Association and partly directly by the the City Council. The agency arrangements are carried out under the general direction of a Joint Committee which has the following membership :—

Chairman : T. W. Hopkins, Esq. (Leeds District Nursing Association).

Local Health Authority Representatives :

Ald. Sir G. Martin, K.B.E., J.P.,

Ald. Miss E. M. Lister,

Counc. Mrs. W. Shutt,

Counc. H. Drake, L.D.S.,

Counc. Mrs. M. Fish.

Whitkirk District Nursing Association Representative :

Mrs. Livingston.

Leeds District Nursing Association Representatives :

F. Baker, Esq.,

Mrs. Collings,

Mrs. A. Hollis,

Mrs. W. D. Lane,

Miss H. Lumb,

Miss M. E. Lupton,

Miss H. J. McLaren,

Mrs. Pape,

C. G. Peake, Esq.,

Mrs. C. Richardson,

B. P. Watson, Esq.

Ex Officio :

The Medical Officer of Health or his Representative.

The work of the district nurses is supervised by the following Superintendents :—

Lovell Street Home—Miss J. Corcoran,

Holbeck Home—Miss E. A. P. Magowan,

Hunslet Home—Miss E. Boulton.

Services provided directly by City Council—Miss E. G. Meadows.

Thanks are due to the members of the Joint District Nursing Association for the care and attention which they have given to the Home Nursing Service, which had been maintained at a high standard of efficiency throughout the year.

As mentioned above, the Home Nursing Service is administered partly on an agency basis and partly directly. This division is merely an administrative one; in practice the Home Nursing Service is, as it must be, a single co-ordinated service covering the whole city. Boundaries between one home nursing district and another do not exist so far as the patient is concerned. The following record of the year's work relates therefore to the Leeds Home Nursing Service as a whole.

Miss E. G. Meadows, Supervisor of Home Nursing, reports as follows :—

As will be seen from the table, the Home Nursing Service continues to expand throughout the city. The nursing of the sick in their own homes helps very considerably in reducing the pressure on hospital beds for both acute and chronic cases. In the former cases beds are released earlier than would otherwise be possible and in the latter, beds become available for the more needy cases. Close co-operation exists between the hospitals and the Home Nursing Service.

During the year 107 cases of persons living under conditions unsuitable for home nursing were reported from various sources and resulted in either transference to hostels or hospitals, a very small number being dealt with under Section 47 of the National Health Service Act, 1946.

Nursing Report.—The total nursing staff at 31st December, 1951, shows an increase of 10 and consisted of 3 Superintendents, 30 full-time resident nurses, 23 full-time non-resident nurses (including 3 male nurses) and 25 part-time non-resident nurses.

A house on the Moortown Estate was allocated to the Home Nursing Service and a nurse appointed who commenced duty in September, 1951.

The number of motor cars for use on the district has been increased to 17; they are a means of saving valuable time particularly in areas where public transport is not readily available.

The number of cases nursed during the year was 10,746 and the number of visits paid was 196,750 (an increase of 1,458 cases and 20,053 visits on the previous year).

The following table shows the figures over a period of three years.

Classification	1949		1950		1951	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	4,695	112,718	5,758	126,887	6,649	142,404
Surgical ..	2,433	40,924	2,149	37,015	2,499	39,075
Children under 5 years ..	1,479	9,642	1,071	7,312	1,147	7,642
Pneumonia ..	163	2,304	148	1,948	234	2,723
Tuberculosis ..	81	2,480	76	2,727	125	3,974
Maternal complications	33	206	42	401	53	544
Ophthalmia neonatorum ..	13	95	5	41	4	44
Infectious diseases ..	32	306	39	364	35	344
Totals ..	8,929	168,675	9,288	176,695	10,746	196,750

MEDICAL REQUISITES LOAN SCHEME.

The provision and distribution of medical requisites has again been carried out by the Health Department with the assistance of the St. John Ambulance Brigade. To the latter the Health Committee extends its grateful appreciation of their services.

In accordance with Section 28 of the National Health Service Act, 1946, the City Council has developed a scheme for the loan of sick room equipment and medical and surgical requisites.

There are three depots in the City for the issuing of medical requisites, viz :

City of Leeds	Monday to Friday
Public Health Department, 12, Market Buildings, Leeds 1	9.30 a.m. to 4.30 p.m. Saturday 9.30 a.m. to 12 noon.
St. John Ambulance Depot, 208/210, Armley Road, Leeds, 12	Monday to Friday 7.0 p.m. to 9.0 p.m. Saturday 2.0 p.m. to 4.0 p.m.
City of Leeds Chest Clinic, 74, New Briggate, Leeds, 2	Monday to Friday 9.30 a.m. to 4.30 p.m. Saturday 9.30 a.m. to 12 noon

The latter depot is provided for the use of Chest Clinic patients only, whose requirements are of necessity on a long term basis.

The personnel of the St. John Ambulance Depot is composed of voluntary workers, who often at inconvenience to themselves

help maintain the continuance of the scheme. Great credit is due to them for their untiring efforts and co-operation. The stock at each of the above centres has been gradually built up to meet the requirements of the public, no charge is made for the actual loan but reimbursement required for damage.

The majority of sick room requirements are for short periods only in which case the following conditions of loan apply :

- (a) Articles shall be returned in clean and serviceable condition within one month from the date of issue or renewal of loan.
- (b) Loan period can be extended on application to issuing depot.
- (c) Leeds Corporation to be reimbursed in the event of damage to, loss of, or failure to return articles.

The requirements of certain types of chronic patients are of a more lasting nature, and the policy adopted in these cases is for periodical visits to the patients' home to inspect the articles on loan.

On return to the issuing depot all articles are transferred to the Stanley Road Disinfestation Centre for carbolising and disinfecting previous to being returned to stock ready for re-issue to the public.

Medical requisites are loaned on recommendation from General Practitioners, home nurses, midwives, hospitals and clinics who are supplied with the necessary application forms by the Health Department.

The use of medical requisites in a Home Nursing Service is indispensable and the rapid growth of the scheme shows that it fills a real need.

The public on the whole shows its appreciation of the service by co-operation in the scheme and the careful use of the articles loaned and the return of the same ; only a small minority of borrowers proved less helpful.

During the year 4,753 articles were loaned, 3,718 renewed and 4,339 returned.

The following classified table gives the figures over three years.

Medical Requisites	1949		1950		1951	
	Loaned	Returned	Loaned	Returned	Loaned	Returned
Bed pans ..	38	10	673	547	1,062	966
Air rings ..	44	10	801	673	1,198	1,103
Draw macintoshes ..	24	8	691	546	1,028	935
Back rests ..	10	4	418	296	609	566
Urinals ..	1	..	292	196	429	409
Miscellaneous ..	11	4	240	154	427	360
Totals ..	128	36	3,115	2,412	4,753	4,339

SECTION 26

VACCINATION AND DIPHTHERIA IMMUNISATION

BY

G. R. BAXTER, M.D., B.Ch.D., D.P.H., D.T.M. & H.
Assistant Medical Officer of Health for Immunisation

The main features of the year 1951 were the lowest incidence of diphtheria (two cases) ever recorded in Leeds and the absence of any death from diphtheria.

There was an increase in the number of immunisations and vaccinations done by general practitioners under the Local Authority's arrangements. There was a definite advance in immunisation against whooping cough and Leeds again took part in trials sponsored by the Medical Research Council.

Issue of Prophylactic Material to Practitioners.—The amounts of the various materials issued during the year were as follows:—

Material	1950	1951
Diphtheria (P.T.A.P.)	$1,438 \times 0.5$ c.c.	$2,950 \times 0.5$ c.c.
Diphtheria (T.A.F.)	798×1 c.c.	653×1 c.c.
Combined diphtheria and whooping cough material ..	361×5 c.c.	420×5 c.c.

The use of the combined diphtheria-whooping cough material has been temporarily discontinued at the clinic. It is still issued to general practitioners on request. The use of an approved combined material against diphtheria and whooping cough has many advantages.

Vaccinations.—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table:—

	Under 1 year	1-4 years	5-14 years	15 and over	Total	1950 Total
Vaccinated ..	3,415	357	96	282	4,150	3,819
Re-vaccinated ..	268	64	59	1,033	1,424	1,146
Total ..	3,683	421	155	1,315	5,574	4,965

Of the 5,574 vaccinations and re-vaccinations, 2,445 were carried out at the infant welfare clinics. From the returns of primary vaccinations in infants it is calculated that only approximately 42·0 per cent. of the infant population has been protected. This is a slight improvement on last year.

Vaccinations and Immunisations done by General Practitioners.—

The following table gives details of vaccinations and immunisations done by general practitioners and reported to the Health Department during 1951 and the corresponding yearly total figures for 1950 are given for comparison.

	Vaccinations	Re-vaccinations	Completed immunisations	Refresher doses
January ..	94	17	55	13
February ..	126	28	93	8
March ..	210	65	143	13
April ..	200	71	150	11
May ..	217	77	151	31
June ..	274	112	262	18
July ..	140	82	151	28
August ..	203	76	159	35
September ..	262	98	218	45
October ..	114	35	117	32
November ..	173	105	197	38
December ..	241	108	250	34
Total 1951 ..	2,254	874	1,946	306
Total 1950 ..	2,192	643	1,629	92

Diphtheria Immunisation.—The work has proceeded as usual throughout the year in addition to the expanding work of the clinics caused by vaccinations and whooping cough inoculations. In many infant welfare centres one immunisation session is now held monthly for protection against all three diseases and it is hoped that before long this arrangement will be possible at all infant welfare centres.

The large numbers attending for whooping cough inoculations make this arrangement impossible at present at several of the larger centres and separate whooping cough sessions are still necessary.

During the year 8,154 primary immunisations were completed, 1,946 by general practitioners and 6,208 by Medical Officers in this Department. The births recorded during the 12 months ended June 30th, 1951, were 8,124.

Of 7,685 refresher doses given in 1951, 306 were given by general practitioners and 7,379 by this Department. The refresher doses are usually given at schools and it is largely due to these refresher doses that the incidence of diphtheria has been progressively reduced.

Parents can now indicate on the consent forms for diphtheria immunisation that they would like their own doctor to do the inoculations. In such cases the general practitioner is notified and immunisation record cards are sent to him for these children.

Schick Tests.—During the year 239 Schick tests were done. In 14 cases or 5·9 per cent. results were positive and appropriate treatment was given to protect these patients. The test is normally used in adults, e.g. nurses or teachers whose work is closely connected with children.

Mobile Clinic.—The mobile clinic was again used during the summer months; 39 sessions were arranged covering 8 districts. The service is very popular in the outlying areas and was responsible for 925 completed immunisations and 5 refresher doses. These are all in children who would not otherwise have been protected. The co-operation of the health visitors greatly helped in this work.

The mobile clinic is worthy of development and of a specially designed vehicle. The propaganda value of such a vehicle would be considerable and many economies might be effected by its use throughout the year instead of the present seasonal use.

Home Visits.—These have again increased markedly during 1951. The number of children completely immunised was 660 as compared with 455 in 1950. This necessitated 1,259 visits and 57 special sessions in addition to home visits which are fitted in during return journeys from infant welfare centres.

The service is provided for the benefit of mothers, who for health or family reasons, are unable to attend the regular clinic. The visits are arranged only when recommended by the health visitors.

Investigation of the Diphtheria Prophylactic Material—P.T.A.P.—In collaboration with the Medical Research Council the investigation continued until the end of March. The work entailed special visits (in selected cases) within 48 hours after the inoculation, in order to record reactions, and monthly follow-up visits were paid for a period of six months to record any sickness in the inoculated child.



BEHIND THE SCENES—IMMUNISATION

A daily routine. Examining needles for sharpness or defects prior to sterilization. For any injection each child has a separate, sterilized needle, which has previously been examined and passed. Well over 20,000 injections are given each year at the various Leeds clinics.

The official report on this work has not yet been published but the results, so far as Leeds is concerned, seem very favourable.

During 1951, 1,767 visits were made in connection with this investigation. Schick tests were done in 56 instances and 48 of these attended for reading and all were negative, showing that adequate protection had been established.

P.T.A.P. has now become the standard material used to give protection against diphtheria and is one of the materials available to general practitioners.

Estimate of Child Population immunised against Diphtheria.—On 31st December, 1951, it was estimated that 67.3 per cent. of children under five years (72.8 per cent. between the ages of one and five) and 95.7 per cent. between the ages of five and fifteen had been immunised against diphtheria. It is calculated that of children up to the age of fifteen years 84.5 per cent. have been protected.

The table on page 90 illustrates the progress of the immunisation scheme since its inception in 1928.

Diphtheria in the Inoculated.—Of the 167,700 persons immunised since 1928, none contracted diphtheria in 1951. Only two cases (both in unimmunised adults) occurred in the city. There were no deaths. The result of many years hard persistence in immunisation work is seen in the above figures. Comparison with former years is interesting; for example, in 1937 there were 941 cases of diphtheria resulting in 44 deaths.

Investigations at Homes of Notified Diphtheria Cases.—During the year 31 cases were investigated and appropriate action taken. Immunisation was offered to all contacts. These visits are of great value in making known the benefits of immunisation.

Whooping Cough Immunisation.—Since 1947 Leeds had already taken part in two trials in connection with immunisation against whooping cough. A full report of the previous two trials was published in the British Medical Journal on June 30th, 1951.

This work is sponsored by the Medical Research Council and in February, 1951, a further stage of these trials commenced. This trial differs from the previous two in that there are no "control" children and all the children now receive a true whooping cough vaccine.

Children who took part in the previous trials were given the opportunity of having refresher doses of this new and proved material and immunisation against whooping cough was offered to all children who had acted as control children in the earlier trials.

During the year 531 children received refresher doses and 289 of the control children received a full course of three inoculations and were protected against whooping cough.

In connection with the new trial commenced in February, 1951, the following figures are given :—

Children completely immunised against whooping cough—three doses	2,786
Children included in the follow-up scheme	1,148
Routine visits made to homes	6,715

After the full course of inoculations, parents are asked to notify the Department if the children come into contact with known cases of whooping cough, or if they develop "suspicious" coughs which might be whooping cough. Special investigations are then made and throat swabs are taken, if necessary, for bacteriological examination.

Visits made for investigations	468
"Trial" children investigated	119
Contacts investigated	53
Swabs taken from "trial" children	90 negative, 7 positive
Swabs taken from contacts	64 negative, 32 positive
Number of swabs taken at the request of general practitioners	8 negative, 6 positive

Combined Diphtheria and Whooping Cough Immunisation.—Except in special circumstances this treatment has been discontinued at the clinics. During the year general practitioners were supplied with material sufficient to immunise 722 children against both these diseases.

It is estimated that some 8,084 children under five years of age have received inoculations against whooping cough during the past four years. This means that approximately one child in every five, under five years of age, is now protected against whooping cough.

Inoculations for Overseas.—During the year 672 persons going overseas and requiring protection against one or more of the diseases shown below attended the Immunisation Clinic and received preventive inoculations as follows :—

Smallpox (vaccination)	..	..	..	..	436
Typhoid (T.A.B.)	..	..	..	..	277
Cholera ..	..	..	..	..	154
Typhus ..	..	..	..	..	18
Tetanus ..	..	..	..	..	13

Other Work undertaken by the Section.—In addition to the normal functions of the Section, the following work was undertaken :—

Examination of Convalescents.—One special session per week is now given to these examinations and extra sessions are arranged as the occasion arises.

During the year 1,476 applicants for convalescence, including 302 children, were examined. Of these cases 78 (5·3 per cent.) were reported as requiring attention for nits before acceptance. This percentage is more than double that of 1950, a disturbing fact.

Welfare Services Committee.—During the year 156 aged and infirm people were examined and reported upon for the Welfare Services Committee. Details are as follows :—

Home visits ..	..	..	..	..	66
Examined in hospital ..	..	..	..	..	44
Examined at Central Clinic ..	..	..	..	..	46

Training.—Many student health visitors received instruction on the organisation and working of immunisation clinics and several sessions were arranged for this important work. The demonstrations were much appreciated and the time and effort spent on this work is amply repaid by the very real and willing co-operation of the newly qualified health visitors.

Staff.—I acknowledge with many thanks the willing help and co-operation of medical, nursing and clerical staff throughout the year.

DIPHTHERIA IMMUNISATION.
Illustrating the progress of the Immunisation Scheme since its inception.
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928- 1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	Total.
Under 1 year ..	80	34	79	25	56	383	102	68	210	38	75	24	..	..	..	..	..	..	788	3,127	3,301	2,561	3,479
1-2 years ..	97	45	156	28	163	820	200	245	820	215	411	941	3,980	3,990	4,412	5,110	5,137	5,304	4,923	3,078	2,931	2,714	under 5 years
2-3 ..	39	30	169	45	171	937	114	177	788	116	173	814	2,262	1,024	469	240	777	418	455	438	457	514	at end of 1951
3-4 ..	35	37	161	66	184	1,188	117	92	1,008	96	121	943	2,053	1,063	463	220	557	327	220	231	249	277	29,030
4-5 ..	27	28	152	75	204	1,638	114	79	1,241	64	62	865	1,940	1,043	381	257	463	288	260	196	147	193	
5-6 ..	9	25	296	148	202	2,337	163	72	1,752	46	30	1,563	1,486	1,667	451	359	556	366	323	328	290	263	
6-7 ..	8	17	248	183	236	2,522	86	53	1,818	12	10	1,450	940	1,622	302	233	467	296	229	286	215	234	Total
7-8 ..	7	26	106	58	184	2,546	54	27	1,239	7	6	1,174	676	1,482	197	185	392	225	165	143	141	108	5-10 years
8-9 ..	11	22	54	18	166	2,606	30	7	571	13	6	979	466	1,357	164	188	275	153	126	132	95	72	32,365
9-10 ..	11	11	45	18	172	2,647	27	9	396	6	3	926	325	1,271	157	142	259	142	110	119	70	51	
10-11 ..	15	9	63	16	132	2,955	28	14	317	19	4	892	252	1,197	130	152	250	100	90	108	79	64	
11-12 ..	5	10	30	8	160	2,846	30	7	287	17	4	921	205	1,089	109	128	249	113	67	73	60	55	Total
12-13 ..	4	6	27	10	122	2,930	30	7	212	19	5	839	193	1,193	96	109	185	97	50	69	55	40	10-15 years
13-14 ..	8	4	10	8	89	2,673	54	5	154	32	7	704	175	1,035	78	79	138	100	61	55	35	40	31,439
14-15 ..	7	4	1	4	53	475	83	..	17	20	..	74	148	382	8	29	34	13	49	54	31	27	
15 years and over	8	7	7	2	107	408	696	144	25	174	37	65	..	..	55	79	83	43	53	54	48	23	15 years & over 73,908 Total age not known 958
Age not known	9	3	17	14	51	151	9	129	317	..	213	34	..	..	11	..	..	..	..	..	..	..
TOTALS ..	380	318	1,524	726	2,452	30,062	1,937	1,135	11,172	894	1,167	13,208	15,101	19,415	7,483	7,510	9,822	8,773	10,338	8,665	7,464	8,154	167,700

SECTION 27

AMBULANCE SERVICE

BY

F. E. J. LARGE
Ambulance Officer

The table appended shows the work carried out by the Municipal Ambulance Service during the year :—

Type of Case	Number	Mileage
By Ambulance :—		
Accidents (Emergency Calls)	3,099	
Illness	1,886	
Maternity	4,184	
Tuberculosis	76	
Hospital admissions and discharges	18,657	
Infectious diseases	978	
Mental	225	
Lunacy	40	
Special treatment	22,433	
Others (incl. 776 fruitless journeys)	1,759	
Total	53,337	
By Sitting Case vehicles :—		
Maternity and Child Welfare	1,278	
Hospital treatment	78,983	
Immunisation	988	
Doctors and Midwives	2,256	
Others (incl. fruitless journeys)	1,620	
Total	85,125	
Mortuary Service :—		
Bodies removed	755	5,023
Grand Total	139,217	700,693

In addition to the above, 66,362 cases were conveyed by the Hospital Car Service, 31 by private hire cars and 5,769 Leeds cases were carried by the ambulances of other Authorities under the co-ordination arrangement.

The following table gives a summary of the cases removed and the mileage covered by the Municipal Ambulance Service ambulances and sitting case vehicles during the year. The figures for the four preceding years are given for comparison.

	1947	1948	1949	1950	1951
Cases :—					
Ambulance ..	22,760	32,693	43,976	50,364	53,337
S.C. vehicles ..	11,657	40,143	64,181	85,855	85,125
Total ..	34,417	72,836	108,157	136,219	138,462
Mileage :— ..					
Ambulance ..	148,739	231,152	310,545	317,032	324,224
S.C. vehicles ..	91,989	286,811	307,601	354,849	371,446
Total ..	240,728	517,963	618,146	671,881	695,670

Staff.—The total staff of the Ambulance Service is 127 made up as follows :—

Administrative	16
Midwives	8
State Enrolled Assistant Nurses	2
Female Ambulance Attendants	14
Shift Leaders	5
Drivers	78
Cooks and Cleaners	4

Vehicles.—*Ambulances.*—During the year 2 new Daimler ambulances were purchased and 2 old ambulances disposed of. The strength remained unaltered at 32.

Sitting Case Vehicles.—During the year 9 sitting case ambulances and one car were purchased, 4 old sitting case ambulances and 3 old cars were disposed of, bringing the total strength of this class of vehicle to 24.

Mobile Medical Unit.—This unit was used by the Immunisation Section on 38 occasions covering 694 miles.

Accidents.—During the year accidents to service vehicles numbered 37 involving 30 drivers, an average of one accident per 18,937 miles. The majority of the accidents were of a trivial nature.

“ 999 ” Calls.—The total number of this type of call received during the year was 4,283.

Radio Telephone.—A transmitter and 14 mobile sets were installed and operating the first week in January, 1952. A further 16 mobile sets are on order, delivery being promised for the beginning of March, 1952—a further step in improving the service.

Accommodation.—*Central Station, Torre Road.*—It is very disappointing that the building of the new Ambulance Station in Saxton Lane has had to be deferred as, owing to the expansion of the Service, the accommodation is inadequate for both vehicles and staff. Vehicles are still having to be garaged at Seacroft Hospital (“B” Group Hospital Management Committee), Stanley Road (Cleansing Department) and at the Factory-in-the-Field at considerable expense as drivers have to be paid overtime for taking the vehicles to the garages after completion of their normal duties.

The introduction of radio control has increased the difficulties due to overcrowding of operational staff at the Central Ambulance Station, since the radio control operator has to work in a restricted space in the same room as the rota duty clerical staff.

Sub-Station, Green Hill Road.—The conditions at this station are ideal and the station gives excellent cover to the west side of the city.

SECTION 28

PREVENTION, CARE AND AFTER-CARE

HEALTH EDUCATION AND PUBLICITY

Leeds Committee for Social Hygiene and Health Publicity.—The following held office during the year :—Chairman, Dr. J. H. E. Moore ; Vice-Chairman, Ald. Mrs. D. Murphy, J.P. ; Honorary Secretaries, Dr. I. G. Davies and Dr. D. B. Bradshaw ; Honorary Treasurer, Mr. J. Peacock.

Membership.—The Committee, as at present constituted, comprises 20 members nominated by various interested organisations and 10 co-opted members.

Local Activities.—As in previous years, the Committee provided lecturers to address Youth Clubs, Associations and the like on various health topics. The topics which proved most popular were general ones such as “The work of the Health Department,” “The National Health Service,” “Food Hygiene” and the like.

In October and November the Committee held a series of evening lectures at the Parochial Institute, Bennett Road, Leeds. The course dealt with various health matters likely to be of interest to the general public and the lectures were given by local doctors. Although the series was well advertised the public response was disappointing.

At many of its meetings the Committee considered ways and means of stimulating public interest in health education and a number of possible lines of publicity were followed up. Most of these proved unpromising and there is clearly difficulty in getting public support for health education as such. This is not to say that the public is uninterested but there are now many agencies active in this field.

Posters, Leaflets, etc.—Copies of all posters and leaflets issued by the Central Council for Health Education have been received and where appropriate have been distributed within the city. Six former Empire Marketing Board frames have again been utilised for the display of posters.

Health Education Journal.—The Health Education Journal was circulated to all members of the Committee quarterly.

Hygiene.—Publicity material bearing upon the clean handling of food was issued to catering establishments in the city by the Central Council for Health Education and also by the Committee.

National Activities.—Government sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

The Committee, during the year, has received the Ministry of Health's display sets on various health topics and has distributed these for exhibition to Corporation Departments, hospitals and Associations.

Conferences.—The Committee sent no delegates to any conference during the year.

MEDICAL SOCIAL WORK.
(General)

BY

MISS I. B. PATON,
Medical Social Worker.

Type of case dealt with.—The work of the social workers in 1951 greatly increased; during the year 362 cases were dealt with, involving 571 interviews and 1,914 visits, as compared with 240 cases, 576 interviews and 866 visits in 1950. This increase has largely been brought about by the Geriatric Almoner at St. James's Hospital referring for after-care aged persons discharged from hospital. They are visited regularly, helped in every way possible and their condition is reported to the hospital. Other cases have been referred by medical practitioners, National Assistance Board officials, personnel managers, health visitors, home helps, almoners and other social agencies in the city. In some instances they were referred as a result of a letter to the Medical Officer of Health. The following table gives an indication of the kinds of problems dealt with.

Hospital cases :

After-care cases	..	..	..	..	79
Financial and home circumstances	..	..	..	..	21
Circumstances of patients wishing admission to hospital	..	..	..	..	5
Admission to hospital	..	..	..	..	34
Financial assistance	..	..	..	..	24
Domestic help	..	..	..	..	23
Employment or change of employment	..	..	..	..	20
Clothing, bedding, wool, etc.	..	..	..	..	18
Admission to hostels	..	..	..	..	17
Aged persons living alone	..	..	..	..	16
Housing	..	..	..	..	15
Matrimonial cases	..	..	..	..	15
Treatment required at Mental Health clinic	..	..	..	..	15
Lodgings	..	..	..	..	12
Home nursing requests	..	..	..	..	7
Enquiries from workers in other areas	..	..	..	..	6
Convalescence	..	..	..	..	6
Legal aid	..	..	..	..	3
Admittance of babies to day nurseries	..	..	..	..	3
Cases referred to Sanitary Section	..	..	..	..	3
Problem families	..	..	..	..	3
Displaced persons	..	..	..	..	3
Requests for invalid chairs and ramp	..	..	..	..	3
Problem girls	..	..	..	..	2
Admittance of children to Homes	..	..	..	..	2
Requests for new spectacles	..	..	..	..	2
Admittance to nursing homes	2
Social Clubs	1
Specialist's advice requested	1
Funeral expenses	1

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The above cases have meant much work with the four officers of the National Assistance Board and the social workers would like to thank the Area Officers for their willing co-operation at all times.

Five cases were referred to the Education Department for help with children's clothing ; thirty-one cases were referred to the British Red Cross Society, which resulted in many aged people being helped with blankets, bedding, clothing, shoes, etc. Seven cases were referred to the Leeds Council of Social Service, seven to the Marriage Guidance Council, six to the Disablement Resettlement Officer, three to the Blind Welfare Department, two to the Work-people's Hospital Fund and one to each of the following :—Wireless for the Bedridden Poor, Association for the Care of Cripples, Infantile Paralysis Society, 1930 Fund for Nurses, Royal Artillery Association, British Legion, S.S.A.F.A. and School Medical Officer.

Social Care of the Unmarried Mother.—In this branch of the work it is pleasing to record that there was an increase in the number of women and girls having an illegitimate child who took advantage of the advice and help of the social workers. During the year 235 cases were visited and advised as compared with 228 in 1950. In 187 cases it was the first, in 28 cases the second, in 7 cases the third and in 2 cases the fourth illegitimate child. In 11 cases married women gave birth to an illegitimate child.

Of the 235 women and girls visited, 54 were returning from hospital to their home or lodgings, 73 were to be married, 8 were returning to stay with relatives or friends ; 41 applied for admission to Wyther Hostel, 5 to Mount Cross Home and 4 to Browning House Mother and Baby Home. Twenty-one cases were referred to the Roman Catholic Social Worker and 4 to the Church of England Moral Welfare Worker. Fifteen girls were returning from hospital to reside with the putative father but in 3 cases the girls planned to marry when divorce proceedings were concluded. In 9 cases the girls had a home confinement and in one case the girl was under the care of the Care of Children Department. With the exception of one case who was referred by her doctor, all the women and girls attended the Department's Infant Welfare Centres.

Two girls were helped to obtain a layette, pram and cot. Six girls were helped with affiliation orders and clerical situations were found for two girls.

Thanks are due to Miss Rose of the Employment Exchange and to Mrs. Moore, Matron of the Greater World Hostel, for helping many girls.

After-Care.—During the year 40 girls who have been in Wyther Hostel have been visited from time to time.

Barrack Road Girls' Club.—During the early months of the year the activities of the Club were of a social order. In summer, during the Festival of Britain season, some of the girls attended the Exhibition at Woodhouse Moor, the play at the Civic Theatre and the Ballet at Temple Newsam. Two Saturday afternoon meetings were held and the girls who attended brought their babies to the Club. Several requests have been made for more of these meetings and it is hoped to arrange a day's outing to the seaside next summer. In November the Education Department provided a dress-making teacher and, with her help and the use of the sewing-machine provided by the Health Committee, many useful garments have been made by girls. The average attendance at the Club has been about 14.

The Canadian Red Cross and the Australian Express Gift Parcels Scheme donated 86 food parcels during the year and these were distributed by the social worker.

During the year the social worker has attended the Personal Service Committee of the Leeds Council of Social Service and monthly meetings of St. Margaret's Committee and Mount Cross Home.

In spring and autumn, eight student health visitors received training in the fundamental principles of medical social work.

Warmest thanks are due to the Editor of the "Yorkshire Evening Post" for the gift of three hampers of new toys. These were given to 118 children known to the social workers and health visitors. These toys are greatly appreciated.

The social workers have received much help in their work from the Welfare Services, Mental Health and Children's Departments and from their colleagues in the Voluntary Organisations.

VENEREAL DISEASES
MEDICAL SOCIAL WORK

BY

Miss M. D. HEARN, A.M.I.A.
Medical Social Worker

The social work in the Department for treatment of venereal diseases was seriously interrupted during 1951, illness preventing the Almoner from working during the first part of the year. Many patients were therefore not interviewed, though every effort has been made to repair omissions and to resolve remaining social problems.

The number of new patients attending the Women's Department for investigation was 523, of which only 161 were found to be infected. It is interesting to note the steep fall in the number of new patients during the last five years, though it has remained fairly constant during the last three years, and that the fall in the number of infections has been still greater. The following figures indicate this :—

In 1947 of 954 new patients	519	were infected
„ 1948 „	731	„ „ 367 „ „
„ 1949 „	562	„ „ 232 „ „
„ 1950 „	579	„ „ 230 „ „
„ 1951 „	523	„ „ 161 „ „

This trend doubtless reflects the efficacy of modern methods, both medical and social, of the management of these infections, as well as the educative work carried on by the various health organisations. Unfortunately, there seems no evidence that the social conditions and behaviour conducive to these infections have been lessened.

The lowered incidence of infections is found largely amongst the younger age groups who are normally found to have early infections, but the number of patients with late manifestations of disease, usually older patients, has not varied greatly.

The 523 new patients were referred to the Clinic by various agencies—or fear of infection may have driven them to seek advice, sometimes after much delay and with great reluctance.

Referred by private doctors	40
,, other hospitals or clinics	169
,, husband attending this clinic	48
,, " " elsewhere	1
,, consort attending this clinic	32
,, " " elsewhere	1
,, parents attending this clinic	65
,, child " " "	5
,, siblings " " "	4
,, various social workers or Homes	78
Transferred from other Venereal Diseases Clinics	13
Attended voluntarily	67

The trend mentioned in paragraphs 2 and 3 is shown in the following analysis of these 523 new patients:—

AGE GROUPS									
	-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50+
Infected ..	6	7	24	27	22	18	16	12	29
Non V.D. ..	115	64	51	44	33	21	12	10	12
MARITAL STATE									
	Under 16	Single	Married	Married & apart	Divorced	Widowed			
Infected ..	6	33	84	21	5	12			
Non V.D. ..	126	137	77	11	2	9			
DIAGNOSIS									
	Syphilis								
Primary	Secondary	Within first year	Later	Congenital					Gonorrhœa
2	9	3	63	16					68

These patients are not only of varying ages but of many varying types and consequently the social problems associated with their infections and attendance at the Clinic differed greatly. Their co-operation in the treatment, both medical and social, suggested for their rehabilitation, depends to a large degree on their will and ability to do so, though much can be affected socially to guide and reinforce their efforts.

An important aspect of the medico-social work in this Department is to ascertain, where possible, the source of infection and to arrange for investigation. The source of a late manifestation is often unknown or untraceable after so long a time lapse. Of the 63 late syphilis patients new in 1951, 36 were unable to give useful information though obviously anxious to do so. Promiscuous patients often cannot, or do not wish to, reveal the sources of their infections; 23 such patients were also unable to help. Of the remaining infected patients, the husband, consort or parents responsible for the infection were traced and brought under investigation where possible.

Notifications received from other areas, of sources of infection in this area, have decreased enormously, only one being received during 1951.

Despite the efforts to persuade patients to attend the Clinic regularly the defaulting patient remains an intractable problem. This failure to co-operate seems to be due to an inability to appreciate the serious results of neglect of treatment and also a lack of sense of responsibility, not only regarding personal health, but to the community. Of the 161 new infected patients, 32 defaulted making 53 defaults during the year. There were 45 re-attendances; 2 were found to have removed and were consequently transferred to another Clinic and 6 have not yet returned to treatment.

Of all the patients, old as well as new, attending during 1951, a total of 206 patients have made 246 defaults. Of these, 203 re-attendances have resulted from reminding letters and 3 were traced and subsequently transferred to other Clinics.

Though this problem remains, reduction in the incidence of defaulting patients failing to re-attend the Clinic has resulted. The following figures indicate this:—

PERCENTAGE OF DEFAULTERS.

Year returned	To total number of patients	To number of infected patients	Before completion of treatment	After completion of treatment but before final test of cure
1941	14.65	17.52	15.37	2.15
1942	12.44	15.06	12.29	2.77
1943	9.32	13.38	11.25	2.13
1944	8.42	11.99	10.74	1.25
1945	5.89	8.63	7.45	1.18
1946	6.11	8.39	5.99	2.40
1947	6.12	8.56	4.77	3.79
1948	4.42	6.20	3.14	3.07
1949	4.10	5.79	2.22	3.57
1950	3.04	4.55	1.48	3.07
1951	3.31	5.49	0.89	4.60

The steady fall in the rate of default is no doubt due, in part, to the more optimistic attitude engendered in patients by the shorter modern treatments of these diseases and also to the co-operation of the Almoner to mitigate the difficulties experienced by many patients in attending regularly.

Visiting patients in their homes, for whatever purpose, to persuade contacts to attend, defaulters to re-attend or for social reasons is of great value, for the character of the occupants is reflected by their surroundings and a truer perspective of the whole situation can be gained than by discussion in the Clinic. Altogether a total of 275 visits has been paid, about half of which when the patient was not at home. Sometimes several visits have to be made on different days and at different times before the patient can be found and interviewed. Visiting also reveals apparently insoluble problems arising from the shortage of houses; elderly relatives sharing homes already overcrowded and sometimes the beds of young children; or young married couples unable to find homes of their own. Such situations have been found to be the indirect cause of some infections.

All these aspects of medico-social work can only be attempted after confidence has been established between the Almoner and the patient. Some patients may be able to solve their own problems, though the relief that discussion frequently brings may help towards this end. Others may need much more intensive and prolonged guidance as well as practical assistance.

Most patients at first are apprehensive, not only of possible disease, but of the necessary examinations and tests as well as of disclosures of their private lives. Assurances of the secrecy observed and the subsequent ability to speak freely of their fears and difficulties bring immense relief since many patients dare not confide in any friend or relative.

These disclosures frequently reveal much distress of mind. The married woman may need help in readjusting herself to a changed marital relationship and home situation resulting from her husband's unfaithfulness. Or she may even feel that she cannot continue her married life and must obtain a separation or divorce. This attitude may pass in time and especially where there are children of the marriage the mother nearly always decides that for their sake the home must be kept together. In the few cases where resentment remains and a broken home becomes inevitable it may be necessary to arrange for legal aid to assist in taking the case to Court.

The single girl learning that she is infected may have to face a very difficult problem, especially if she is pregnant by the man whom she had arranged to marry. Her family may not be helpful and she may have to decide whether to overlook her fiance's unfaithfulness and continue preparations for the marriage, or to face life and the care of her coming baby alone.

Children also have problems—maybe fear of the treatment they must have to ensure health ; or, on leaving school, future work may have to be chosen carefully to avoid physical or mental strain. Perhaps their home surroundings may suggest the possibility of moral danger.

Though the Almoner's work lies mostly with the women and children, social problems also confront men patients. Marital difficulties arise and the Almoner's services are often enlisted in helping the wife to overcome her distress and resentment as well as her fear of attending the Clinic. Others are interviewed for various reasons such as the tracing of sources of infection ; difficulties of attending regularly: or there may be need for a change to more suitable work.

Rehabilitation of those patients, usually men, whose infections have caused permanent physical unfitness for their normal work is of great importance. The success of re-training depends a great deal upon the patient's character and adaptability. Some who have been employed on one type of work all their lives are reluctant to contemplate a change, while all must learn to accept their limited physical capacities and to plan their lives within these new limits, but most are anxious to become again self-supporting and useful members of the community and face the new situation with fortitude.

Older patients and those with defects such as blindness or deafness and lack of mobility nearly always present a variety of problems, physical, financial and environmental, to resolve which the Almoner must give long-term medico-social care. The confidential nature of the work of the Clinic sometimes precludes the co-operation of social workers in other fields, both voluntary and statutory, in the planning and carrying out of this care, but whenever possible it is invited, most willingly given and greatly appreciated.

It must not be concluded from the foregoing that in the everyday coping with the social problems arising from venereal infections, the need for preventive work is overlooked. The tracing of contacts is one aspect of this, but in a city the size of Leeds constant watch must be maintained for foci of infection. The following extract from the Report of the Chief Medical Officer of the Ministry of Health for 1949, published six months ago, though written of preventive medicine in general, seems to be particularly apposite regarding venereal diseases.

"The nation, in its recent preoccupation with the curative and specialist services, seems to have lost sight of what it owes to the preventive health services, which, for many decades have been responsible for the saving of an infinity of human life and suffering. These preventive health services work unobtrusively and smoothly. Because their greatest victories are marked only by the absence of cases and deaths of disease, these victories have no news value or popular appeal, nor are their efforts noticed save when, on occasion, something goes wrong. . . ."

In the same Report, after commenting on the decreasing incidence in the number of venereal disease infections he states "the present position is very satisfactory and the outlook for the future excellent."

However, an attitude of complacency must not be allowed to prevent continued vigilance, though some satisfaction may perhaps be felt at the spectacular reduction in the number of infections during the last few years.

CONVALESCENT TREATMENT

BY

MRS. WINIFRED LINSLEY,
Convalescent Treatment Scheme Organiser

The number of applications for rest convalescence has slightly decreased. This is accounted for by the fact that there were no homes available for mothers and babies, consequently the number sent away is also smaller. It is hoped that the Council's new home for mothers and babies at Southport will shortly be opened; this home will accommodate 14 mothers and 13 babies.

During the year 2,120 applicants were recommended by hospitals, maternity and child welfare clinics, school clinics and general practitioners. Of this number, 1,369 were sent to convalescent homes. Withdrawals numbered 557 and 290 applications, chiefly mothers and babies, were carried forward to 1952.

The following table gives details of the number of adults and children sent for convalescence and the average number of weeks spent per case in convalescence.

	Adults	Children
Number sent for convalescence ..	1,085	284
Weeks away	2,168	870
Extensions (weeks)	4	10
Total number of weeks away	2,172	880
Average number of weeks per stay ..	2	3

The Care of Children Department has again given valuable help by caring for children in Street Lane and Spring Bank Homes whilst mothers were away. Thanks are due to St. George's Crypt and Women's Voluntary Services for their generous help in the provision of clothing for necessitous patients going for convalescent treatment.

Thanks are also due to Mrs. Robinson and Mrs. Sharp, our voluntary workers, for the splendid work they have done escorting children to and from convalescent homes. More voluntary workers are required for this work.

Patients numbering 1,476 attended at Central Clinic, Park Square, prior to going to convalescent homes.

Patients were placed in 13 convalescent homes as follows :—

Home		Adults	Babies	Children	Total
Arnside	.. .. .. .. ..	67	..	2	69
Bridlington	.. .. .. .. ..	160	..	8	168
Blackpool	.. .. .. .. ..	257	..	..	257
Blackpool U.C.M. (R.C.)	.. .. .. .. ..	2	2	..	4
Grange (Boarbank Hall)	.. .. .. .. ..	118	..	2	120
St. Annes (Blackburn)	.. .. .. .. ..	125	..	..	125
St. Annes (Rockfield)	.. .. .. .. ..	201	..	..	201
Southport	.. .. .. .. ..	146	..	..	146
Southport (Jewish)	.. .. .. .. ..	9	..	..	9
St. Annes (Ormerod)	.. .. .. .. ..	..	..	109	109
St. Annes (Seabright)	.. .. .. .. ..	..	..	8	8
Freshfield	.. .. .. .. ..	..	..	102	102
Morecambe	.. .. .. .. ..	..	..	51	51
Total	.. .. .. .. ..	1,085	2	282	1,369

The following table gives monthly statistics of cases sent for convalescence.

	Adults	Mothers and Babies	Children	Total
January	29	..	..	47
February	33	..	16	49
March	81	..	24	105
April	102	..	8	110
May	110	..	25	135
June	126	..	24	150
July	123	..	17	140
August	131	..	29	160
September	126	1 1	26	154
October	134	1 1	36	172
November	76	..	29	105
December	12	..	30	42
	1,083	2	282	1,369

SECTION 29

HOME HELP SERVICE

BY

Mrs. D. W. ALFORD
Organiser

At December 31st, 1951, the Home Helps employed numbered :—

Whole-time (47 hours)	69
Part-time (27-30 hours)	37
Co-opted (10-30 hours)	41

$\left. \begin{array}{l} \\ \\ \end{array} \right\} 147$

During the year 1,252 cases received help. Statistical details of these cases are shown in the following tables :—

AMOUNT OF ASSISTANCE PROVIDED WEEKLY DURING 1951.

Type of Case	Up to 8 hours	8-12 hours	12-20 hours	20-30 hours	Over 30 hours	No. of cases
Maternity ..	2	..	5	15	392	414
Emergency illness ..	25	22	31	42	194	314
Aged people ..	66	65	51	42	75	299
Long-term illness ..	17	32	28	31	51	159
Tuberculosis ..	5	4	8	22	12	51
Hospital discharge ..	..	..	2	2	11	15
Totals ..	115	123	125	154	735	1,252

LENGTH OF TIME ASSISTANCE PROVIDED DURING 1951.

Type of Case	Up to 2 weeks	2-4 weeks	1-3 months	3-6 months	Over 6 months	No. of cases
Maternity ..	394	20	..	..	..	414
Emergency illness ..	201	82	28	3	..	314
Aged people ..	121	34	46	38	60	299
Long-term illness ..	17	18	44	31	49	159
Tuberculosis ..	3	9	12	12	15	51
Hospital discharge ..	4	6	3	2	..	15
Totals ..	740	169	133	86	124	1,252

The above cases were brought to the notice of the Service by the following : general practitioners (42 per cent.) ; hospital doctors and almoners (23 per cent.) ; home nurses, midwives, health visitors, personnel managers, neighbours, etc. (16 per cent.) ; Welfare Services (15 per cent.) and Blind Welfare Services (4 per cent.).

Maternity Cases.—The majority of the maternity cases helped were home confinements and often required full-time assistance. Discharged patients from maternity homes required fewer hours of help.

Emergency Illness Cases.—This group covered every type of case—sudden operations, influenza, pneumonia, accidents and emergency care of children. Mothers of young children, overworked and ill, were enabled to take the required rest or convalescence ; the help given made possible the husband's return to work and continuance of normal home life.

Tuberculosis.—Co-opted workers are employed solely for work in this field. The services of these home helps are required almost full-time for those cases awaiting admission to sanatorium and for help with the heavy part of domestic work after discharge.

Aged People.—This group needs varying hours of work, the bedridden needing daily help and the infirm a few hours weekly. The presence of a home help enabled the aged man or woman to keep his or her home and encouraged the continuance of pride in the home and personal appearance.

Sanitary Circumstances

BY

JAMES GOODFELLOW, M.R.San.I., A.M.I.S.E

Chief Sanitary Inspector.

With Comments on the following matters :—

MEAT INSPECTION
DISEASES OF ANIMALS
MILK SUPPLIES
FOOD AND DRUGS
FOOD HYGIENE
FACTORIES
SMOKE ABATEMENT
UNFIT HOUSES
GENERAL SANITATION
RODENT CONTROL

MEAT INSPECTION

BY

D. FORBES

Supervisory Meat Inspector

Animals slaughtered.—During the year 159,832 animals were slaughtered for human consumption at the two Ministry of Food slaughterhouses in Leeds. The carcase and offal of each animal were inspected at the time of slaughter by Meat Inspectors stationed at the Abattoirs.

The following table gives an analysis of the animals slaughtered for human consumption at the two slaughterhouses :—

ANIMALS SLAUGHTERED AT MINISTRY OF FOOD SLAUGHTER-HOUSES.

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Slaughter-house No. 1 (Public Abattoir)	1950	18,920	6,801	12,252	73,613	3,496	115,802
	1951	21,088	5,829	13,986	62,787	8,254	111,944
Slaughter-house No. 2 (Danube Road)	1950	6,398	2,683	4,470	25,687	6,050	45,288
	1951	7,349	2,317	3,985	23,639	7,692	44,982

In addition to the above animals, 2,906 horses were slaughtered at the Public Abattoir for human food, as compared with 2,534 horses slaughtered last year. The type of horse being slaughtered was of a fair quality and remained fairly constant.

The number of bovine animals slaughtered for human consumption has increased from 51,524 in 1950 to 54,554 in 1951. There has been a decrease of 12,874 in the number of sheep slaughtered for human consumption.

The number of pigs slaughtered has increased by 6,400. This was related to the increased use of pork to augment the meat ration during a period of shortage in the early months of the year.

Slaughterhouses.—The licences of five slaughterhouses were renewed during the year, namely those belonging to the Leeds Industrial Co-operative Society, Ltd., Danube Road; P. H. Hutchinson, 21, Otley Road; C. H. and J. W. Ellison, Cross Lane, Wortley; S. U. Wilson, Marshall Street, Crossgates and C. Walker, Harrison's Yard, Bramley. The bulk of the slaughtering took place at the Leeds Abattoir. The slaughterhouse belonging to the Leeds Industrial Co-operative Society, Ltd. continued to be used as a slaughterhouse by the Ministry of Food. In connection with the annual renewal

of the Leeds Industrial Co-operative Society, Ltd. slaughterhouse licence special arrangements were made requiring the laying on of a proper water supply in the lairages; and with regard to other improvements. Provision was made for hot water supply to the beast and sheep slaughterhouses and for improved arrangements with regard to the storage and removal of manure from this slaughterhouse.

Of the remaining licensed slaughterhouses, three were used for the occasional slaughtering of cottagers' pigs under licence from the Ministry of Food.

The knacker's yard belonging to J. R. C. Wilkinson at 133, Carr Moor Side, Hunslet, was well conducted and accordingly its licence was renewed.

Slaughter of Animals Acts, 1933 to 1951.—During the year 8 new licences to slaughter or stun animals were granted by the City Council and 101 were renewed.

Special steps have been taken to ensure that the obligation to water and feed animals in the lairages has been duly complied with.

Whole and part carcasses condemned.—The following table shows the different species of animals and the number of whole carcasses or parts condemned for tuberculosis and other diseases:—

CARCASES INSPECTED AND CONDEMNED.

	Cattle (excluding cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
NUMBER KILLED ..	28,437	8,146	17,971	86,426	15,946	2,906
NUMBER INSPECTED ..	28,437	8,146	17,971	86,426	15,946	2,906
ALL DISEASES EXCEPT TUBERCULOSIS.						
Whole carcasses	10	50	115	116	105	10
Carcases of which some part or organ was con- demned	2,951	1,966	22	2,579	1,605	248
Percentage of numbers inspected affected with diseases other than Tub- erculosis	10·41	24·75	0·76	3·12	10·72	8·88
TUBERCULOSIS ONLY.						
Whole carcasses	62	270	2	..	47	3
Carcases of which some part or organ was condemned	1,736	2,568	6	2	651	1
Percentage of numbers inspected affected with tuberculosis	6·32	34·84	0·04	0·002	4·38	0·14

Cysticercus Bovis.—Systematic inspection of the carcases and offals for *cysticercus bovis* and *cysticercus cellulosæ* have continued to take place at both abattoirs. No infestation was found severe enough to warrant the refrigeration of a carcase for the specified period. Only isolated cysts have been found which were other than in a calcified state.

In no case were more than two cysts found in any one carcase. The distribution of the cysts was as follows :—heart 63, diaphragm 38, head (messenter muscles) 46.

Detention Room for suspected carcases and offal.—During the year a compartment at the Public Abattoir was set aside by the Markets Department for the sole use of the meat inspectors for the detention of carcases and offals which are under suspicion. The accommodation provided is only of a temporary nature. Nevertheless, it fulfills a very important need in the inspection of carcases and offals by allowing infected carcases to be detained under lock and key in a separate compartment. Thus it is possible to make further examinations when rigor mortis is complete and, if necessary, further opinions may be obtained. A photograph of this detention compartment for meat under suspicion is shown opposite.

Meat and other foods condemned as unsound.—The total weight of food destroyed by consent during the year was 732,145 lbs., as compared with 819,791 lbs. in the previous year. About 68·0 per cent. of the total weight condemned comprised carcases of cattle, swine and sheep or parts of carcases and offal found to be diseased at the time of slaughter.

All meat and offal condemned is treated with dye to make it unsaleable and by arrangement with the Ministry of Food goes to an approved firm for boning-out and fat extraction (for manufacture into tallow only) and the residue passes forward for manufacture into fertilisers. The plant used for the digestion of condemned meat is shown in the photograph opposite.

*Plant used for the digestion of condemned meat and
the extraction of fat for tallow manufacture.*



*Detention Room for suspected carcasses and offal
showing further examination being carried out after
completion of rigor mortis.*



Details of food destroyed are given in the following table :—

MEAT, ETC., DESTROYED BY CONSENT.

	1951.	1950.	1949.	1948.
Beef	197,067 lbs.	230,180 lbs.	184,630 lbs.	176,356 lbs.
Veal	4,875 ..	3,873 ..	3,249 ..	2,889 ..
Mutton	4,830 ..	6,647 ..	4,630 ..	3,891 ..
Pork	28,219 ..	21,360 ..	14,395 ..	7,408 ..
Bacon and Ham	37 ..	332 ..	2 ..	..
Offals..	269,544 ..	292,403 ..	224,010 ..	204,595 lbs.
Rabbits	12,214 ..	16,074 ..	7,165 ..	1,417 ..
Poultry	2,502 ..	2,149 ..	3,985 ..	2,149 ..
Game..	341 ..	43 ..	282 ..	60 ..
Horse Flesh	7,480 ..	5,184 ..	14,745 ..	8,849 ..
Horse Offals	3,333 ..	3,167 ..	..	..
Fish	50,651 ..	48,271 ..	51,207 lbs.	42,366 lbs.
Shellfish	10,890 ..	22,258 ..	22,105 ..	35,494 ..
Vegetables	20,557 ..	34,641 ..	47,107 ..	91,901 ..
Fruit	16,797 ..	15,148 ..	14,814 ..	11,796 ..
Tinned goods	80,247 ..	87,063 ..	60,135 ..	78,512 ..
Cheese	1,441 ..	97 ..	27 ..	..
Edible Fungi .. ..	.. ..	.. ..	188 ..	.. ..
Bread and Cereals	3,141 lbs.	6,362 lbs.	9,118 ..	10,254 lbs.
Flour	555 ..	.. ..	330 ..	2,401 ..
Confectionery	7,472 ..	8,969 lbs.	.. ..	12,609 ..
Sundries	9,952 ..	15,642 ..	38,990 lbs.	15,985 ..
Totals	732,145 lbs.	819,791 lbs.	701,114 lbs.	708,932 lbs.
No. of Eggs.. .. ..	.. .. ..	.. .. ..	.. .. ..	592

Rabbits.—The condemnation of rabbits has remained high due to large numbers of carcases from the Orkneys being a long time in transit in humid weather at the beginning of the season.

Fish.—The quality of fish from the ports to the wholesale market tends to vary with the amount available for distribution. During periods of acute shortage, fish of very doubtful quality has been received. On occasion frozen fish had to be dealt with which was not too fresh when stored or had been so long under refrigeration that it had lost its nature. Some consignments of fish were also found to be affected by dirty ice on boats from the Northern fishing grounds which had the effect of turning the fish sour.

The boxes used for despatch of fish have improved as new boxes have taken the place of old ones. The worst boxes now arriving in Leeds come from a large Scottish port.

Vegetables.—The quantity of vegetables condemned has diminished during the last few years, partly owing to weather conditions and also to the number of wholesalers who disposed of their wastes without a condemnation certificate.

Tinned Goods.—The condemnation of tinned goods has remained very high. This is largely due to the number of tinned hams from the Continent which were found to be unfit for human consumption. There were a number of causes for this : (1) under-curing, (2) under-cooking, (3) bone taint* (therefore being unfit before canning), (4) light gauge tin plate used for canning which on being subjected to rough handling results in split seams, and (5) the inevitable nail holes caused by careless packing.

Cheese.—The amount of cheese condemned has increased considerably. This is not due to the condemnation of normal rationed cheese but of cream cheese imported from the Continent and found to be either sour or mouldy on arrival.

Shellfish.—The condition of shellfish coming into the city for sale continued to receive special attention.

During the year 12 samples of mussels exposed for sale in the wholesale and retail market were taken and submitted to the Medical School for bacteriological examination. Of the 12 samples, 4 were from layings in England, 5 from Eire and 3 from Denmark. One sample from layings in England and one from Eire were reported as unsatisfactory.

The sample of mussels from Top Pandora Sand, King's Lynn, proved to have a high *B.Coli* content. Representations were made to the Local Authority at King's Lynn and at the time of writing an Order has been made under the Public Health (Shellfish) Regulations, 1934, to the effect that mussels from these layings shall not be sold or exposed for sale unless they are (1) subjected to a satisfactory process of cleansing or (2) relaid in pure water for such period as may be approved by the Council or (3) subjected to a process of sterilisation by steam pressure for about 6 minutes.

Only a few consignments have arrived from Killorglin (Eire) and these had been purified ; it is possible that the cost of purification and transport may be a deterrent to dispatch from this source.

Salmon and Freshwater Fisheries Act, 1923.—The first consignment of salmon arrived without a certificate of origin. This was remedied on the omission being pointed out to the wholesaler. All other consignments have had the proper certificate with them, usually wrapped round each individual fish.

Pest Contamination.—A number of complaints have been received about infestation of foodstuffs by *stegobium paniceum* or the drug store beetle. Beetle infestation of a store was also traced on investigation to *oryzaephilus surinamensis* in shelled walnuts. Appropriate action was taken in all cases with regard to foodstuffs and buildings. Particulars of these infestations were also forwarded to the Ministry of Agriculture and Fisheries, Infestation Control Division at Hull, so that they could take whatever action was necessary under Part II of the Prevention of Damage by Pests Act, 1949.

Food and Drugs Act, Section 9 (1) (a).—Proceedings were taken against a person for exposing for sale unsound herrings unfit for human consumption. The defendant was found guilty and fined £10.

Proceedings were taken against a butcher for being in possession of unsound meat. The case was dismissed owing to wrong date of offence on the summons.

Proceedings were taken against a retailer for selling a vanilla slice which was unfit for human consumption. The retailer was found guilty and given a conditional discharge for 12 months. The manager of the shop was fined £3 for aiding and abetting.

Persons Act, 1861, Section 42.—Proceedings were taken against an employee at the Public Abattoir for assaulting a meat inspector in the course of his duties. The defendant was found guilty and fined £5.

DISEASES OF ANIMALS.

Tuberculosis Order of 1938.—The table hereunder, which shows the number of bovines suspected to be affected with tuberculosis and the action taken, was compiled from information supplied to the Local Authority by the Ministry of Agriculture and Fisheries.

No. of suspected animals reported or found.	No. affected with tuberculosis and slaughtered.	No. of animals found to be not amenable to the Order.
12	12	..

Swine Fever Order of 1938.—During the year 54 cases of suspected swine fever were notified, all of which were investigated by the Ministry of Agriculture and Fisheries. Eight of these cases were confirmed.

Regulation of Movement of Swine Order of 1950.—Under this Order 202 licences for the disposal of 787 pigs from the Whitkirk Auction Mart were issued and 455 visits have been paid to pig-keeping premises to ascertain whether the recently removed store pigs were detained and isolated for the appropriate period. In addition, 125 licences have been issued to pig-keepers for the movement of pigs within the city.

Anthrax Order of 1938.—Seven cases of suspected anthrax were reported during the year, two cases being confirmed by the Ministry of Agriculture and Fisheries, and on post-mortem examination of the carcases of the other 5 animals it was found that death had ensued from causes other than anthrax. In connection with the confirmed cases, one was a cow from farm premises outside the city which was sent to the knacker's yard at 133, Carr Moor Side, Hunslet, and during the process of dressing the carcase, anthrax was suspected. The Divisional Inspector of the Ministry of Agriculture and Fisheries was notified and it was duly certified that the animal had been affected with anthrax at the time of its death.

In the second case a cow had died at farm premises in the city. The Divisional Inspector of the Ministry of Agriculture and Fisheries was notified and he certified that the animal was suspected to have been affected with anthrax at the time of its death. Pathological specimens were taken and forwarded to the Ministry's Veterinary Laboratory, which reported that the animal was affected with anthrax. In connection with this case, a notice was served on the farmer under Regulation 20 of the Milk and Dairies Regulations, 1949, prohibiting the sale of all milk produced at his farm unless it was adequately heat treated to the satisfaction of the Medical Officer of Health.

Efficient disinfection was carried out at the knacker's yard and the farm premises by the Disinfection Section of the Department using small portable flame throwers, strong disinfectant and chloride of lime, also the vehicles used in connection with these cases were efficiently disinfected.

The carcases were disposed of by incineration at the Armley Road Destructor.

Animals (Landing from Ireland, Channel Islands and Isle of Man) Order of 1933.—During the year, 6,033 Irish cattle and 7,582 Irish sheep were received under licence on direct purchase by the Ministry of Food for immediate slaughter at the two slaughter-houses in the city. As compared with the previous year, the number of cattle decreased by 929 and sheep increased by 992.

Foot and Mouth Disease.—During the year no outbreak of Foot and Mouth disease occurred in the city. On January 22nd an outbreak of this disease was confirmed at farm premises in Burley-in-Wharfedale and on November 17th an outbreak was confirmed at farm premises at Sicklinghall, Wetherby. These outbreaks resulted in the declaration of infected areas of approximately 15 miles radius.

The city was included in both these infected areas and therefore all animal movements became subject to licence control. It was necessary, therefore, to authorise licences for the holding of markets for the sale of fatstock for immediate slaughter at the Victoria Cattle Market, Gelderd Road, Leeds, and the Whitkirk Auction Mart.

The city was released from restrictions arising out of the Burley-in-Wharfedale outbreak on 25th February and was released from the restrictions due to the Sicklinghall outbreak on 5th December. During these two outbreaks, 845 and 350 licences respectively were issued for the movement of animals for immediate slaughter and for breeding purposes only.

Fowl Pest Order of 1936.—No outbreaks of this disease occurred in the city during the year. Notice Form B imposing restrictions on the movement of poultry exposed to infection was served by the Ministry of Agriculture and Fisheries on a poultry dealer in the city. This dealer had been showing poultry at the National Poultry Show at Olympia, London, where a suspected outbreak of this disease had occurred.

Notice Form A, under the above Order defining a suspected infected place, was served by the Ministry of Agriculture and Fisheries on a poultry dealer in the city. This dealer had purchased four hens from a poultry dealer near Keighley and since the transaction fowl pest had been confirmed on the premises at Keighley.

Warble Fly (Dressing of Cattle) Order, 1948.—Copies of the Order in pamphlet form were delivered to all cattle owners in the city, together with stamped post-cards for notification of infested cattle to the Department.

All cattle owners' premises were visited at least once a month from 15th March, 1951, until 30th June, 1951, and the cattle inspected. The actual monthly treatment of infested animals was in most cases supervised by the Lay Inspector under the Diseases of Animals Acts. In all other cases the animals were inspected shortly after treatment. Thirteen postcards were received from cattle owners reporting that 103 cattle were infested.

It is worth noting that cattle owners reported a considerable reduction this year in the number of infested cattle and all showed a spirit of co-operation and willingness to assist. The personal visit to each farm and the leaving of pamphlets and notification post-cards seems to have been very effective.

No prosecutions were necessary under the Order.

DETAILS OF WORK DONE					
No. of visits paid to farms	206				
No. of cattle on farms	6,300				
No. of leaflets and cards distributed	91				
No. of cattle infested	103				
No. of infested cattle treated	103				
No. of non-infested cattle treated voluntarily	1,115				

The Transit of Horses Order, 1951.—This Order came into operation on 19th March, 1951, and regulates the carriage of horses in rail and road vehicles. It requires (1) vehicles to be suitably constructed and fitted and to be cleansed and disinfected at intervals and (2) horses carried in the vehicles to be fed and watered at intervals and to be protected against inclement weather and injury from overcrowding.

Legal Proceedings.—A pig-keeper was prosecuted under the Regulation of Movement of Swine Order, 1950, for moving store pigs from the Whitkirk Auction Mart without a licence. The defendant was found guilty and given a conditional discharge for 12 months.

MILK SUPPLIES

The Safety of Milk.—A tremendous amount of work has been done by Supervisory Inspector J. S. Lindley and the inspectors in the Food and Dairies Division in an effort to effect an improvement as regards the sale of ungraded raw milk in the city. By negotiation and persuasion the majority of small milk distributors selling loose milk from the handcan have been induced to drop this practice and have changed over to the sale and delivery of bottled milk only. This means that the dairymen concerned, instead of buying raw milk from local dairy farmers, have changed their source of supply to the big dairies who carry out heat treatment of milk. This has had the

effect of cutting down the amount of ungraded raw milk sold in Leeds from approximately 4·0 per cent. to approximately 2·0 per cent.—a very great improvement. We shall not have an entirely safe milk supply in the city until the entire milk supply is required to be compulsorily heat treated.

It is hoped that very soon the Minister of Food may see fit to make an Order declaring this region, including the City of Leeds, to be a "Specified Area" for the purpose of ensuring the use of special designations for all sales of milk by retail for human consumption.

Sale of Sterilised Milk.—There has been a further increase in the sale of sterilised milk in the city during the year and a considerable increase in the number of shops which are now registered for the sale of bottled milk only.

Dairies and Milk Sellers.—The following tables show the number of registered dairies and milk sellers in the city.

DISTRIBUTORS OF MILK AND DAIRY PREMISES.

	Dairies	Distributors of milk
No. on the register on 31st December, 1950 (including 16 entries in respect of distributors with premises in the surrounding County Area)	195	168
No. added to the register during the year .. . .	..	1
No. removed from the register during the year ..	146	117
No. on register on 31st December, 1951	49	52

DISTRIBUTORS OF BOTTLED MILK ONLY.

No. of distributors of milk on the register at 31st December, 1950	462
No. added to the register during the year	187
No. removed from the register during the year	61
No. of distributors of milk on the register at 31st December, 1951	588
No. of shops from which bottled milk only is sold, at 31st December, 1951	805

GRADED MILK LICENCES.

Description of Licences.	Number in force on 31st December		
	1949	1950	1951
To use the designation "Tuberculin Tested"—			
1. To sell by retail	72	101	115
To use the designation "Accredited"—			
1. To sell by retail .. .. ..	..	..	1
To use the designation "Pasteurised"—			
1. Pasteurisers' Licences	4	7	7
2. To sell by retail	26	128	141
To use the designation "Sterilised"—			
1. Sterilisers' Licences	1	1	2
2. To sell by retail	508	550	718

Legal Proceedings.—*Milk and Dairies Regulations, 1949 (Articles 30 and 31).*—A distributor of milk and his son were summoned for (a) carrying a sack for the collection of pig swill whilst delivering milk and (b) carrying dirty material likely to cause contamination on a van used for conveying milk. The distributor of milk was found guilty and fined £5 on the first charge and given a conditional discharge for 12 months on the second charge. His son was given a conditional discharge for 12 months for aiding and abetting.

Milk and Dairies Regulations, 1949. (Article 26 (1)).—A large firm of retail distributors of milk were summoned for filling a dirty milk bottle with "Tuberculin Tested" (Pasteurised) milk. The firm was found guilty and fined £5.

A distributor of milk was summoned for filling a dirty milk bottle with milk. The defendant was found guilty and fined £5 and ordered to pay £1 costs.

Dairy Inspection and Milk Sampling.—The following visits were paid during the year by the Food and Drugs Inspectors:—

To Dairies	813
To bottled milk stores	30
Other visits of inquiry	461

During the year 881 samples of milk were submitted to the Departmental Laboratory for bacteriological examination. The samples were taken from the following grades of milk:—

" Pasteurised "	422
" Tuberculin Tested " (Pasteurised)	130
" Sterilised "	73
" Tuberculin Tested " (Farm bottled)	241
" Ungraded "	15

Samples were taken from distributors' premises, distributing centres, in course of delivery, at local institutions and from road vehicles used for the conveyance of milk. The accompanying tables give detailed information of the results of the tests applied.

METHYLENE BLUE (REDUCTION) TEST.

Designation	Total Samples Taken	Result of Test				
		Satisfactory		Unsatisfactory		
		No.	Percent- age	No.	Percent- age	
*Pasteurised	Dairies ..	306	300	98·0	6	2·0
	Schools ..	104	104	100·0	..	..
	Hospitals ..	12	12	100·0	..	..
*Tuberculin Tested	Pasteurised	130	130	100·0	..	..
†Tuberculin Tested—	Farm bottled ..	241	230	95·4	11	4·6
†Ungraded ..	..	15	12	80·0	3	20·0

*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

† Satisfactory samples not to decolourise Methylene Blue at 37°C in 4½ hours, May to October, or 5½ hours, November to April.

PHOSPHATASE TEST.

Designation	Total Samples Taken	Result of Test				
		Satisfactory		Unsatisfactory		
		No.	Percent- age	No.	Percent- age	
Pasteurised	Dairies ..	306	298	97·4	8	2·6
	Schools ..	104	104	100·0	..	..
Tuberculin Tested	Hospitals ..	12	12	100·0	..	..
	Pasteurised	130	130	100·0	..	..

Satisfactory samples not to give colour reading of more than 2·3 Lovibond Blue Units.

TURBIDITY TEST

Designation	Total Samples Taken	Result of Test				
		Satisfactory		Unsatisfactory		
		No.	Percent- age	No.	Percent- age	
Sterilised	73	72	98·6	1	1·4

Biological Tests.—During the year 601 samples of milk were submitted to the City Bacteriologist for biological examination for the presence of tubercle bacilli. The results are shown in the following table :—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percent- age	No.	Percent- age
Tuberculin Tested ..	70	1	1·4	69	98·6
Accredited	33	..	..	33	100·0
Pasteurised	12	..	..	12	100·0
Tuberculin Tested (Past- eurised)	4	..	..	4	100·0
Ungraded	482	12	2·5	470	97·5
Total	601	13	2·2	588	97·8

Milk and Dairies Regulations, 1949—Regulation 20.—During the year it was found necessary to serve two notices under the above Regulations.

In thirteen cases samples of milk taken in the city for biological examination were found to contain tubercle bacilli. The milk in twelve of these cases was taken at large retail dairies in the city, where the milk concerned would be pasteurised before retail sale.

The remaining sample was taken in the street from a producer-retailer and consequently notice under the above Regulations was served on the farmer requiring that all the milk produced at his farm must be adequately heat treated. Following a full investigation by the Ministry's Veterinary Officers, and after the final report was received from the Ministry stating that the herd had now been certified as non-tuberculous, the notice was withdrawn.

A farmer producing milk for retail sale reported the death of a cow which was proved on investigation to be due to anthrax. Consequently notice under Regulation 20 was served on the farmer requiring the heat treatment of all milk produced at his farm. A full investigation at the farm was made and the necessary disinfection carried out. After a period of two weeks the notice was withdrawn.

FOOD AND DRUGS

BY

J. S. LINDLEY

Supervisory Inspector

The Sampling Officers took 1,840 formal and 17 informal samples of milk, 289 formal and 42 informal samples of other foods or drinks and 9 formal samples of drugs.

Administrative action was taken in all cases where the samples were found to be adulterated or deficient. Minor cases of adulteration or deficiency were dealt with by a warning letter to the firm or person responsible. Serious cases were dealt with by prosecution and the results of summonses issued under the Food and Drugs Act, 1938, during the year are shown in the tables on pages 126 and 127.

Extraneous matter in Food.—There has been a further increase in the number of complaints made to the Department with regard to extraneous matter in food. It is thought that the publicity given in the Press to certain Departmental prosecutions with regard to extraneous matter in food has led to increased public awareness of the action that may be taken through this Department.

The objects in food were in some cases objectionable, whilst in other cases they were dangerous, ranging from beetles, glass, soiled finger bandage, wasp, mouse droppings and piece of wire.

During the year the following extraneous matter has been found in food :—

Glass in milk

Beetle in a loaf of bread

Piece of tin in a tin of National Dried Milk.

Part of a dead rodent (mouse or rat) in a brown loaf

1½ in. nail in a loaf of bread

Pieces of string in a loaf of bread

Glass in a loaf of bread

Soiled finger bandage in a pork pie

Piece of tin in a brown loaf

Chalk and sand resembling plaster in a tea cake

Furniture beetles (*stegobium paniceum*) in biscuits

Nail in a wrapped sliced loaf
 Cockroach in a large brown loaf
 Piece of wire in a "sally lunn"
 Moth impregnated with grease in fish and chips
 Piece of metal in a wrapped sliced loaf
 Fly in a loaf of bread.
 Wasp in a jar of mincemeat
 Mediterranean flour moths (*ephistia kulniella*) in large brown loaf
 Tufts of hair in a meat pie
 Mouse dirt in sultanas
 Small quantity of tar acids in a bottle of Dandelion and Burdock.

In addition there were also 10 further instances of extraneous matter found in loaves of bread. This extraneous matter included dirt, coal dust, lemon peel, grease, pieces of cardboard, currants and raisins, lump of common salt, etc.

In some cases the person who purchased the article is unwilling to give evidence and then it is impossible for the Department to institute proceedings. In other cases where the extraneous matter was of a minor kind, a visit by the inspector to the premises and a warning letter have been considered suitable action.

A number of prosecutions have been taken against the offenders and the results of these cases are shown in the table of results of summonses issued under the Food and Drugs Act, 1938, on page 127.

Fertilisers and Feeding Stuffs Act, 1926.—During the year 19 samples of fertiliser (18 formal and one informal) were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. The informal sample was unsatisfactory and this was followed-up immediately by a formal sample which the Agricultural Analyst reported as being satisfactory. All the other formal samples were also quite satisfactory.

Rag Flock and Other Filling Materials Act, 1951.—The above mentioned Act came into operation on 1st November, 1951. It repeals the Rag Flock Acts of 1911 and 1928.

Its purpose is to secure the use of clean filling materials in upholstered articles and other articles which are stuffed and lined.

The new Act differs from the previous Acts in that it requires the Local Authority to (a) licence premises for the manufacture or storage of rag flock on payment of the prescribed fee, which is renewable each year and (b) register premises where rag flock and other filling materials are used on payment of the prescribed fee.

During the year 5 premises were licensed (3 for manufacture of rag flock and 2 for storage) and 32 premises were registered where rag flock and other filling materials were used.

No samples were taken during the year.

Pharmacy and Poisons Act, 1933 (Part II).—The administrative year for the purpose of the above-mentioned Act is the period 1st May to 30th April. The following table gives a detailed summary of the work done during the year ended 30th April, 1952.

Persons on the List on 30th April, 1951	476
Persons added to the List during the year	47
Persons removed from the List during the year	46
Persons on the List on 30th April, 1952	477
Premises on the List on 30th April, 1951	631
Premises added to the List during the year	47
Premises removed from the List during the year	53
Premises on the List on 30th April, 1952	625
Visits paid to :—	
1. Listed Premises in connection with new applications	47
2. Listed Premises in connection with unpaid fees	13
3. Listed Premises for routine inspection	48
4. Unlisted Premises	3
Contraventions :—	
Persons found to be selling Part II Poisons on Unlisted Premises .. .. ..	..
Listed Sellers found with incorrectly labelled Part II Poisons in stock .. .. ..	..
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises .. .. ..	..
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing .. .. ..	..
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling .. .. ..	..

Pharmacy and Medicines Act, 1941.—No contraventions came to the notice of the Department during the year.

SUMMONSES ISSUED DURING 1951 UNDER THE FOOD AND
DRUGS ACT, 1938.

No. of Sample	Article.	Adulteration or Deficiency.	Result of Hearing.
9/L	Milk	16·5% of added water ..	Fined £10 and ordered to pay £1 10s. costs. Producer.
72/L	Fish Paste	50·0% deficient in fish content	Fined £5 and ordered to pay £2 costs. Retailer.
227/L	Milk	5·0% of added water ..	
228/L	Milk	14·0% of added water ..	
229/L	Milk	11·0% of added water ..	
230/L	Milk	4·0% of added water ..	
237/L	Milk	4·5% of added water ..	
238/L	Milk	20·0% of added water ..	Fined £55 and ordered to pay
239/L	Milk	20·0% of added water ..	£1 16s. costs. Producer.
240/L	Milk	13·0% of added water ..	
241/L	Milk	4·5% of added water ..	
243/L	Milk	2·5% of added water ..	
244/L	Milk	7·5% of added water ..	
250/L In- for-mal	Half a Loaf of Brown Bread	Contained part of a dead rodent (mouse or rat)	Fined £15 and ordered to pay £2 9s. 6d. costs. Wholesale Bakers.
821/L	Milk	23·5% of added water ..	Given a conditional discharge for 12 months and ordered to pay £9 11s. costs. Producer.
830/L	Milk	35·0% of added water ..	
996/L	Pepper	Adulterated with 25·0% of flour	Fined £10 and ordered to pay £3 3s. costs. Wholesaler.
1043/L	Milk	14·0% of added water ..	Fined £5 and ordered to pay
1052/L	Milk	12·0% of added water ..	£5 9s. 6d. costs. Producer.
453/F	Milk	5·0% deficient in fat ..	
454/F	Milk	12·0% deficient in fat ..	
464/F	Milk	8·0% deficient in fat ..	
465/F	Milk	3·0% of added water and 22·0% deficient in fat	Given a conditional discharge for 12 months and ordered to pay £2 2s. costs.

SUMMONSES ISSUED DURING 1951 UNDER THE FOOD AND
DRUGS ACT, 1938—continued.

No. of Sample	Article	Adulteration or Deficiency	Result of Hearing
510/F	Milk	17·0% deficient in fat ..	Given a conditional discharge for 12 months and ordered to pay £1 5s. costs. Producer.
896/F	Milk	6·0% of added water ..	
897/F	Milk	5·0% of added water ..	
898/F	Milk	4·0% of added water ..	
900/F	Milk	7·5% of added water ..	
901/F	Milk	7·0% of added water ..	
902/F	Milk	6·0% of added water ..	
903/F	Milk	8·0% of added water ..	
905/F	Milk	7·0% of added water ..	

SUMMONSES ISSUED DURING 1951, UNDER THE FOOD AND DRUGS ACT, 1938.

Article	Extraneous Matter	Result of Hearing
Loaf of Bread ..	Contained 1½ in. nail ..	Fined £5 and ordered to pay 16s. costs. Baker.
Pork Pie ..	Contained a soiled finger bandage	Fined £4 and ordered to pay £2 7s. 6d. costs Manufacturer-retailer.
Bottle of Milk ..	Contained glass ..	Given absolute discharge and ordered to pay 12s. 6d. costs. Distributor.
Fish and Chips	Contained a moth, one inch in length, impregnated with fat	Fined £5 and ordered to pay 2s. 6d. costs. Fish Frier.
Sally Lunn ..	Contained a piece of bent wire 1½ in. long	Given absolute discharge and ordered to pay £1 costs. Bakers.
Wrapped Sliced Loaf	Contained a piece of metal 1¾ in. long	Fined £2 and ordered to pay £5 12s. 6d. costs Bakers.
Loaf of Bread ..	Contained a piece of string	Fined £3 and ordered to pay £1 15s. costs. Bakers.

FOOD HYGIENE.

During the year 1951, 7,616 visits were made to premises used for the sale, storage, manufacture or preparation of foodstuffs intended for human consumption. This figure includes visits to all conceivable types of food premises and trades, ranging from ice-cream factories to fried fish shops and from pickle manufacturers to packers of baking powder. All these premises were visited in accordance with powers contained in the Food and Drugs Act, 1938, and in the Byelaws in force in the city for the handling, wrapping and delivery of food sold or intended for sale for human consumption.

The Department's Codes of Practice, referred to in last year's Report, continue to prove their usefulness. The average trader appears to do his best to conform to these wherever possible, despite the increased difficulty of obtaining building licences for structural improvements to premises. In this connection the Local Authority, having been given fairly wide legal powers in the Food and Drugs Act to deal with unsatisfactory conditions in food premises, should be given corresponding powers to licence essential building works necessary to remedy such conditions, in the same way as they are now able to issue licences for house alterations. This should apply particularly to those trades which are registerable under Section 14 of the Food and Drugs Act, 1938, and would at any rate reduce the frustration felt by many inspectors when they hear of licences being granted for such non-essential works as alterations to shop fronts for the purpose of improved display of goods.

The standard of cleanliness in the food preparing establishments visited by inspectors has in general been satisfactory and on very few occasions has it been found necessary to institute legal proceedings. Generally the sanitary inspector does his best work in giving advice to persons employed in the food trade and in urging constantly the need for scrupulous cleanliness in persons, utensils and premises, if foodstuffs intended for sale to the public are to be safe and wholesome. Nevertheless, there is no doubt that an occasional prosecution has a salutary effect upon certain types of food traders. The results of certain food hygiene prosecutions undertaken during the year are shown at the end of this section.

Transport and delivery of foodstuffs.—*Bread and Confectionery.*—Inspectors continue to stop and examine vans concerned with the delivery of foodstuffs, chiefly of bread and confectionery, and have given several warnings during the year. In particular the practice of stacking empty trays on the footpath before re-loading the vans has been discouraged. In one instance, however, a warning was not considered adequate and a prosecution was instituted.

Where salesmen-drivers are concerned with the delivery of bread and confectionery, the question of how they can keep their hands clean is very difficult. The answer always given to questions on this point is that drivers are supposed to use washing facilities in the shops they visit. The Department takes the view that this arrangement is most unsatisfactory. Delivery vans should be fitted with a washbasin and some means of heating water, such as, for example, a butane gas instantaneous water heater. This view has been accepted by the larger multiple firms in the city and all new delivery vans and travelling shops purchased by these firms have washing facilities with hot and cold water supplies installed.

Transport of Meat, etc.—This continues to be carried out in a fairly satisfactory manner; the fitting of vans with overhead rails for the hanging-up of the meat has not continued, as there appears to be no prospect of a proper loading bay being provided and this type of van would be useless without it. The conveyance of horse-flesh has improved, due in a large measure to the prosecutions undertaken for various infringements of the Regulations. Horse-drawn flat carts are still used for conveying horseflesh; the meat is, however, properly covered by hessian covers before leaving the Abattoir. Improvements have also taken place in the slaughter-houses and slaughtermen now wear protective clothing which is changed weekly. A drying room has also been provided for the drying of this clothing after use.

Restaurants, Cafes, Canteens, etc.—During the year 1,442 visits were paid to cafes, canteens, snack-bars and other places where meals and light refreshments are supplied for sale for human consumption. This number includes those visits paid in accordance with an arrangement with the Leeds Food Executive Officer whereby permits for the acquisition of rationed foodstuffs for use in the preparation of meals for sale to the public are not issued until the

premises concerned have been inspected and certified as suitable for the purpose by this Department. This arrangement throws a considerable amount of additional work upon the inspectors concerned but has proved its worth many times. It ensures that new cafes and similar places are in a condition which satisfies the Food and Drugs Act before they begin to operate, and conforms to the recommendation of the majority of the members of the Catering Trade Working Party that premises should be inspected to see whether they are satisfactory before they are brought into use as catering establishments. Tribute is due to the officers of the Food Licensing Section of the Leeds Food Office who are and have been unfailingly helpful in dealing with these matters.

A few applications have reached the Department this year for approval of mobile canteens and snack-bars. These vehicles generally are intended to operate in various districts outside the Leeds area, but since the licences are issued by the Leeds office of the Ministry of Food, the proprietors are asked to satisfy Leeds requirements. They cannot, of course, under existing law be forced to comply with the provisions of Section 13 of the Food and Drugs Act, 1938, nor indeed would all the items in that Section be applicable. We have, however, made a minimum requirement that the standards for mobile vans and coffee stalls which are set out in paragraphs 47 and 56 of the Report of the Catering Trade Working Party should be attained. We have also insisted in all cases that a supply of running hot water—heated by a butane gas instantaneous water heater—be provided over a proper sink.

With regard to existing cafes and restaurants, the normal work of the Department has continued to secure alterations and improvements in the premises visited. It is undeniable, however, that in certain instances, the registration of catering establishments as recommended in the Report of the Catering Trade Working Party would give the Local Authority a very valuable additional measure of control.

Inspectors in the Factories Division of the Department make visits as a matter of routine to canteens in the factories which they visit. Conditions in these canteens have in general been found to be reasonably satisfactory but, of course, the structural finish of premises used for this purpose is generally not as elaborate as in kitchens where food is prepared for general sale to members of the

public—for example, tiled floors and walls are usually unobtainable. However, the managements of most firms are always ready to fall in with suggestions for improvements which may be made to them and during the year a good deal of work has been done in this direction. Thanks are due for the help given to the Department by H.M. Inspectors of Factories and, in particular, by the Factory Canteen Advisor. In the few instances where unsatisfactory conditions have been found they have been most helpful in co-operating with the Department to secure improvements.

Footwear Repairs.—Occasional reports have again been made to the Department about footwear repairs being received in food shops. This practice is considered to be most undesirable and pressure has been brought upon the persons concerned, either to discontinue the practice or make arrangements so that footwear is handled by assistants who deal with pre-packed goods only.

Ice-cream Premises.—During the year 921 visits were paid to the premises in the city which are used for the manufacture, storage or sale of ice-cream.

Fish-Frying Premises.—The number of visits paid to registered fish-frying premises was 1,392. Twenty-three applicants were granted registration subject to the carrying out of works. In 17 instances applicants were required to appear before the Committee; in two cases the applications were refused and the 15 others were granted subject in each case to the carrying out of proposed works of improvement.

One fish-frier appeared before the Committee to show cause why the registration of his premises should not be cancelled; his proposals for the improvement of the premises were later accepted by the Committee.

Other Registered Food-Preparing Premises.—During the year 391 visits were paid to other registered food-preparing premises such as those used for the preparation or manufacture of sausages, pork products, meat pies, jams, pickles and sauces. Where the premises failed to comply with Section 13 of the Food and Drugs Act, notices were used to effect their remedy. Two persons were required to show cause why registration of premises should not be refused and as a result satisfactory proposals were submitted in each case.

It was necessary to serve 288 informal notices in respect of premises contravening the law and in 9 instances statutory notices had to be served.

Statistical particulars with regard to registration of premises under Section 14 of the Food and Drugs Act, 1938, are set out in the following table :—

REGISTRATION.

Number of premises registered for the manufacture of ice-cream during 1951	2
Number of premises registered for storage of ice-cream during 1951 .. . . . .	..
Number of premises registered for the sale of ice-cream during 1951	138
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (23 fried fish shops, 26 manufacturers of sausages, potted meat, meat pies, etc.)	49
Number of notifications of change of occupier received :— ice-cream premises	45
food-preparing places	47
Number of premises removed from register :— Ice-cream premises (manufacture)	49
Ice-cream premises (sale)	1
Food preparation premises	15
Number of premises on the register 31st December, 1951 :— (a) used for manufacture for sale of ice-cream	69
(b) used for the sale of ice-cream	1,133
(c) used for the storage of ice-cream intended for sale	7
(d) used for the manufacture of sausages, or preparation of preserved food	638

Ice-cream Sampling.—During the year 98 samples of ice-cream were taken for bacteriological examination from the places of manufacture or from local vendors. All the laboratory results were communicated to the ice-cream manufacturers and vendors. When the result showed an unsatisfactory ice-cream, a special follow-up visit was made by the district sanitary inspector to advise on improved methods. Most frequently the cause of bad results has been found to be the inadequate cleansing of plant or utensils and inefficient sterilisation.

The results are shown in the following tables:—

METHYLENE BLUE TEST.

Grade	No. of Samples	Percentage	Remarks
1	34	34·7	Good
2	29	29·6	Satisfactory
3	17	17·3	Unsatisfactory
4	18	18·4	Very unsatisfactory

BACTERIAL COUNT.

Organisms per m.l.	No. of samples	Percentage	Remarks
Under 10,000 ..	30	30·6	Good
10,000-100,000 ..	37	37·8	Satisfactory
100,000-1,000,000 ..	29	29·6	Unsatisfactory
Over 1,000,000 ..	2	2·0	Very unsatisfactory

COLIFORM TEST.

Bacillus Coli	No. of samples	Percentage	Remarks
Absent in $\frac{1}{10}$ th m.l. ..	68	69·4	Good
Present in $\frac{1}{10}$ th m.l. ..	16	16·3	Satisfactory
Present in $\frac{1}{100}$ th m.l. ..	7	7·1	Unsatisfactory
Present in $\frac{1}{1000}$ th m.l. ..	7	7·1	Very unsatisfactory

Legal Proceedings.—*Food and Drugs Act, 1938, Section 13.*—

(a) The proprietors of a wholesale bakery business were prosecuted in respect of alleged unsatisfactory conditions at their premises and were fined £10 on each of 20 summonses—£200 in all. (b) An ice-cream manufacturer was prosecuted in regard to dirty and unsatisfactory conditions at his manufactory and fines amounting to £12 were imposed.

Byelaws under Section 15, Food and Drugs Act, 1938, with respect to handling, wrapping and delivery of Food.—(a) A firm of wholesale bakers was prosecuted (i) for leaving on their van unprotected from contamination bread in course of delivery; and (ii) for depositing bread in a tea chest on the concrete forecourt of a shop, exposed to contamination from flies, dirt, etc. Fines in this case amounted to £10. (b) Six vendors of ice-cream from carts or barrows were prosecuted in regard to various offences against the Byelaws. One was fined £2, another £1 and the others were given a conditional discharge for 12 months. (c) Proceedings were taken against a horseflesh dealer for (i) delivering horseflesh intended for human consumption in a dirty vehicle and (ii) carrying horseflesh for human consumption in dirty sacks. The defendant was found guilty and fined £5 on each charge.

At a later date charges were preferred against a carrier employed by the above-mentioned dealer for further offences against Byelaw 4. On this occasion the carrier was summoned for (i) delivering horseflesh for human consumption covered with dirty hessian sacking and (ii) wearing dirty protective clothing whilst delivering horseflesh for human consumption and was fined £1 on each charge. In addition his employer was found guilty of aiding and abetting and was fined £4. Later in the year this same carrier was again summoned for similar offences and was fined £10.

(d) Proceedings were taken against a driver of a vehicle for delivering horseflesh for human consumption without wearing protective head covering. The defendant was found guilty and fined £5. (e) Proceedings were taken against the driver of a vehicle for delivering horseflesh for human consumption without wearing protective head covering. The defendant was found guilty and given a conditional discharge for 12 months.

Ice-Cream (Heat Treatment, etc.) Regulations, 1947.—An ice-cream manufacturer was prosecuted in respect of offences against the Regulations and given a conditional discharge.

FACTORIES, WORKPLACES AND SHOPS

BY

J. H. WYATT,
Supervisory Inspector.

A special division of the Sanitation Department, having an establishment of 4 male and 2 female inspectors, is chiefly concerned with the inspection of factories, workplaces and shops within the city boundary. The two women inspectors deal principally with the inspection of restaurants and cafes but still make certain visits to factories and other places where the employment of women inspectors is desirable. The staff of the division has been depleted during the year by illness and transfers to other divisions and, for part of the period under review, has consisted of one female and three male inspectors. Nevertheless the staff have worked well and loyally and by ready co-operation with each other have met all calls made upon them with efficiency.

A detailed report upon the work of the division, under various sub-headings, follows.

Factories.—The division deals with all those matters in the Factories Acts, 1937 and 1948, which are the responsibility of the District Council, with the single exception of means of escape in case of fire. This part of the 1937 Act is administered by the Building Surveyor's Section of the City Engineer's Department, an arrangement which entails a certain duplication of visits by inspectors of the same authority and the keeping of duplicate sets of registers with, of course, the attendant need for additional clerical assistance.

The principal powers administered by the Department are contained in Part I of the 1937 Factories Act and are described in the Act as General Provisions affecting Health. The District Council is not, however, empowered to deal with these matters in all factories but has limited duties in factories where mechanical power is used. This entails a sub-division of duties between Her Majesty's Inspectors and the District Council's officers and gives rise to certain anomalies. In my opinion a system whereby the District Council is considered competent to deal with the general cleanliness, overcrowding, temperature, ventilation and drainage of floors in factories where mechanical power is not used, irrespective of numbers employed, but incompetent to deal with the same matters in the smallest factory

using power, a factory which might employ, for example, an electrically driven sewing-machine or a small power driven mixer, is absurd. Further, a division of duties which says that the District Council's officers must inspect sanitary conveniences in all factories, but must not deal with arrangements for personal washing, although both these facilities may be situated in the same compartment, leads to duplication of visits and to confusion in the minds of managers. Inspectors are frequently asked for advice on washing facilities and enquirers often express surprise that such an arrangement should apply. In factories where foodstuffs are prepared and handled the Local Authority can, of course, apply powers contained in the Food and Drugs Act, 1938, and require the provision of washing facilities with adequate hot and cold water supplies. It is much more important that these facilities be provided in food factories than in, say, a clothing factory, but it seems odd that the Local Authority may deal with the one and not the other. To carry matters a stage further, the Local Authority have strong powers under the Food and Drugs Act to ensure cleanliness, adequate ventilation and other related matters in food factories and, in fact, reports upon the cleanliness of such places are occasionally received from Her Majesty's Inspectors, who apparently consider the Local Authority's powers to be superior to their own. Yet, the Local Authority cannot deal with the cleanliness, etc. of the other types of factories where power is used.

It is my opinion, therefore, and that of many of my colleagues who are engaged in similar duties, that the whole of Part I of the Factories Act, 1937, and also part of the Act devoted to washing facilities should be administered by District Councils in all factories, whether or not mechanical power is used.

I must also comment upon the provisions of the Factories Act which deals with the referring of complaints from Her Majesty's Inspectors to District Councils. The Act provides for the setting-up of machinery by which reports about matters to be dealt with by District Councils are sent on by H.M. Inspectors, but appears to have no provision for reciprocation in this respect. There are occasions when our inspectors find contraventions of the Act which should be dealt with by H.M. Inspectors but no statutory arrangement exists for transmitting reports on these.

These remarks are intended to set out very briefly some of the anomalies which exist under present arrangements and are not in

any way intended to disturb the very cordial relations which exist between H.M. Inspectors in the Leeds districts and this Department. On the contrary, H.M. Inspectors are at all times ready to help in any way which lies in their power.

The work done by the Department's inspectors in factories during the year is summarised in the four tables which follow. Three of these are taken from the report which must be made annually by the Medical Officer of Health to the Minister of Labour and National Service setting out certain prescribed particulars on the administration of the Factories Acts.

**INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS)**

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by the Local Authority	568	154	20	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	3,182	2,582	306	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out workers' premises)	2	1	..	..
Total	3,752	2,737	326	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted	
			Referred			
	Found	Remedied	To H.M. Inspector	By H.M. Inspector		
Want of cleanliness (S. 1) ..	47	46	..	9	..	
Overcrowding (S. 2) ..	2	2	..	..	..
Unreasonable temperature (S. 3) ..	..	..	..	1	..
Inadequate ventilation (S. 4) ..	3	2	..	..	..
Ineffective drainage of floors (S. 6) .. .. ..	..	..	..	..	..
Sanitary Conveniences (S. 7)—						
Insufficient	30	19	..	4	..	
Unsuitable or defective ..	625	696	..	27	..	
Not separate for sexes ..	41	43	..	2	..	
Other offences against the Act (not including offences relating to Outwork)	28	..	28	..	..
Total	776	808	28	43	..	

OUTWORK
Sections 110 and III.

Nature of Work	SECTION 110			SECTION III		
	No. of out-workers in August list required by Sect. 110(1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions.
Wearing apparel :—						
Making, etc.	898	..	..	..	..	..
The making of boxes or other receptacles or parts thereof made wholly or partially of paper	57	..	..	..	..	..
Carding, etc. of buttons	3	..	..	..	..	..
Textile weaving	48	..	..	..	..	..
Total	1,006	..	..	..	..	..

OTHER MATTERS.

	Number of		
	Lists.	Outworkers.	
	C.	W.	
Homework :—			
<i>List of Outworkers (S. 110) :—</i>			
Lists received twice in the year . . . . .	..	..	..
" once in the year . . . . .	..	..	..
Addresses of } received from other Authorities . . . . .	..		210
outworkers forwarded to other Authorities . . . . .	..		487
Notices to occupiers as to keeping or sending lists . . . . .	..		358
Prosecutions . . . . .	..	..	..
Inspection of Homeworkers' premises . . . . .	..	..	288
<i>Homework in unwholesome premises :—</i>			
Instances . . . . .	..	..	..
Notices (S. III) . . . . .	..	..	..
Prosecutions . . . . .	..	..	..
<i>Homework in infected premises :—</i>			
Instances . . . . .	..	..	15
Orders made } Public Health Act, 1936 (S. 153) . . . . .	..		..
Prosecutions . . . . .	..		..
[Infectious cases—1 scarlet fever 13 measles and 1 poliomyelitis]			
Matters notified to H.M. Inspectors of Factories :—			
Failure to affix Abstract of the Factories Act, 1937 (S. 128) . . . . .	..	..	28
Action taken in matters referred by H.M. Inspectors	Notified by H.M. Inspector Reports (of action taken) sent to H.M. Inspectors . . .		43
Total number of factories on Register . . . . .	..		3,752
The above total includes 248 bakehouses.			

The number of bakehouses shown at the foot of the table dealing with Other Matters refers only to those bakehouses registered as factories. There are, of course, many other small bakehouses in the city which are not so registered.

During the year the rewriting of the Register of Factories which must be kept by the District Council in accordance with Section 8 (3) of the Factories Act, 1937, was commenced. This register is kept in permanently bound ledgers which are rapidly becoming full. It is now being rewritten on a loose-leaf basis so that it can be expanded to any extent required without the need for rewriting at intervals. This is a big job, involving the checking, cross-checking and rearrangement of nearly 4,000 entries and is proceeding only very slowly owing to the lack of clerical assistance.

The register contains the addresses of 3,752 factories, both mechanical and non-mechanical. During the year 2,737 visits were paid to these; 776 contraventions of the Factories Act were found, including those found during investigation of the 43 reports received from H.M. Inspectors, and 808 defects were remedied. This latter figure includes, of course, a number of outstanding items carried over from 1950; 326 written notices were issued from the Department in this connection.

No requests were received during the year for the approval of the District Council under Section 41 of the Factories Act, 1937, of drinking water supplies obtained otherwise than from a public main.

There are now no basement bakehouses in the city possessing certificates of suitability and no action was therefore necessary under Section 54 of the Act.

During the year two reports were received of anthrax in men employed in tanneries and arrangements for suitable disinfection were made by inspectors.

During the year 288 visits were paid to premises where outwork was carried on, but no instances of work being done under unsatisfactory conditions were found and no action was therefore taken during the year under Section 111 of the Factories Act, 1937. 15 cases of notifiable infectious disease occurred in outworkers' premises, including 13 of measles, one of scarlet fever and one of poliomyelitis. It was not found necessary, however, to take steps under Section 153 of the Public Health Act, 1936, to stop work in these premises. The number of addresses of outworkers forwarded from Leeds to other Authorities shows a sharp increase this year from 88 to 487.

This is due to the receipt of a very long list of outworkers employed by a firm of multiple tailors whose factory is in Leeds and which has branches employing outworkers in all parts of the British Isles. The work of forwarding these addresses to other Authorities threw a considerable extra strain upon the clerical staff of the Department and arrangements have therefore now been made with the firm concerned that their branches should each forward a list of outworkers employed by them directly to the Authority within whose area they lie.

The work of the division's inspectors in factories is not, of course, confined solely to the Factories Act, but also includes the abatement of sundry nuisances under the Public Health Act. For example, the Department frequently receives complaints and takes action to abate nuisances emanating from factories using pungent materials such as, for example, cellulose or synthetic paints used for spraying or naphthalene used in the making of certain types of firelighters. Action taken has generally been of an informal nature and has in most cases been successful in at least reducing smells to a reasonable degree. In several instances it has been found that such nuisances originated from factories registered under the Alkali, etc. Works Regulation Act, 1906, and in these cases H.M. Inspector of Alkali Works has been informed and has dealt with such complaints either singly or in company with inspectors from this division. This liaison with H.M. Inspector is most useful and his help in dealing with some very difficult problems is greatly appreciated. One particular case in this connection is worthy of special mention. It concerns two oil and grease distilling firms which are thought to be chiefly responsible for very offensive odours over a large part of the city area. These factories have caused trouble for many years and some time ago, as a result of representations to him by this Department, H.M. Inspector decided that the processes carried out were registerable under the Alkali, etc. Works Act. The nuisance continued, however, and so many complaints were received that the Town Clerk was instructed by the Health Committee to lay a complaint to the Minister of Local Government and Planning under Section 22 of the Alkali, etc. Works Regulation Act, 1906, that work was carried on at the premises in contravention of the Act and requesting that the Minister inquire into the complaint with a view to proceedings being taken. The Minister has now replied to the Town Clerk

informing him that an inquiry has been made and that one of the firms in question is employing the best practicable means for preventing nuisance but that the other is not. This latter firm has been pressed to make alterations and has now agreed to prepare an improvement scheme for approval.

Inspectors also receive and deal with complaints regarding the fabric of factory buildings—such matters as leaking roofs, defective eaves spouts and fallpipes—and with nuisances from dust emissions, accumulations of refuse and other matters which can be dealt with under powers contained in the Public Health Acts.

The Department also continues to receive complaints of nuisance from noise. All these complaints are investigated but inspectors are at pains to point out to complainants that our powers in this connection are practically non-existent. However, our efforts in dealing with such complaints by informal representations have, in most cases, met with success.

The Department has a very useful liaison with the Town Planning Section of the City Engineer's Department whereby we notify that section of all changes in the occupation of factories in the city which come to our notice and they in turn ask for opinions as to whether particular trades or processes are such as to bring the buildings in which they are carried on within the definition of "special industrial building" contained in the Town and Country Planning (Use Classes) Order, 1948. A number of visits have been paid in this connection to premises where such processes are carried on. Requests are also received from the Regional Licensing Officer of the Ministry of Works for opinions as to the necessity of certain classes of building alterations in factories and many visits have been paid to premises to decide this.

Inspectors in the Factories Division, who spend a great deal of their time visiting factories, are well placed to deal with nuisances caused by smoke emissions from factories and it is noteworthy that the first post-war prosecution for a smoke nuisance was instituted during the year and originated in this division. This matter is still outstanding but the firm against which information was laid has already prepared an extensive alteration scheme and obtained the necessary building licence from the Minister of Works. Their application for this licence was very strongly supported by the Department.

Workplaces.—The number of inspections of workplaces made during the year was 505. The majority of these inspections were, of course, of office accommodation, the definition of workplace in the Public Health Act, 1936, being such as to include offices. All this work is therefore carried out under provisions contained in the Public Health Act and 54 notices were issued during the year requiring defects or contraventions of that Act to be remedied. A summary of this work is as follows:—

Rooms ventilated	3
Overcrowding abated	1
Rooms cleansed..	2
Sufficient conveniences provided	2
Other miscellaneous defects remedied	32

Shops.—Shops inspected during the year numbered 1,117. Inspections are in these instances made under the Public Health Act, 1936, and the Shops Act, 1950, and the defects found were dealt with by the service of 67 notices under those Acts. The works carried out in response to these notices were as follows:—

Shops ventilated	3
Reasonable temperature secured	3
Sufficient conveniences provided	5
Lighting provided	4
Washing facilities provided	19
Other miscellaneous defects remedied	24

There has been an application during the year for exemption from the necessity of providing sanitary conveniences in certain shops in accordance with the provisions of Section 38 of the Shops Act, 1950. This application was in respect of a block of nine shops, seven of which were so small as to make it not a practical proposition to install sanitary conveniences actually in the shops. Exemption certificates were therefore granted for these seven shops but the application in the case of the two remaining premises was refused.

SMOKE ABATEMENT

BY

W. F. SAXTON,
Deputy Chief Sanitary Inspector.

Information of the condition of the atmosphere in relation to pollution by impurities in suspension and by sulphur has been secured by the continued use of appliances at six atmospheric pollution stations within the city boundary. Each of the stations is equipped with a Standard Deposit Gauge and a Lead Peroxide Instrument.

One additional Standard Deposit Gauge, which is used for experimental purposes as a check on local conditions, has been sited throughout the year in Burley Park in the vicinity of the Kirkstall Power Station.

The Smoke Filter and Volumetric Sulphur Dioxide apparatus which was installed in the laboratory at Market Buildings in August, 1950, has continued in use during the year.

Estimation of Atmospheric Sulphur Pollution by the Lead Peroxide Method.—The table on page 145 gives the estimation of sulphur compounds in the atmosphere in the years 1950 and 1951. The station showing the highest monthly average during 1951 was City Centre (3.15) and the lowest Headingley (2.05). Comparison with 1950 shows that, with the exception of Templenewsam, decreases in sulphur pollution were recorded at each station. The monthly average of all stations is produced in graph form opposite page 144.

Deposit Gauges.—The table on page 146 shows the monthly deposit of solids from the atmosphere in tons per square mile for the years 1950 and 1951. The station with the highest monthly average during 1951 was Burley Park (59.52) and the lowest Templenewsam (13.52). Increases were recorded at all stations. In this connection it should be noted that variance in recorded deposit is due mostly to fluctuations in meteorological factors such as monthly rainfall, wind speed and direction. During 1951 the rainfall collected by the Deposit Gauges exceeded the amount collected in 1950. This was particularly so in the months of January and March when the highest increases in both rainfall and solids deposited were recorded at all stations.

The table on page 147 shows the records from 1926 to 1951 of the deposits of solids from the atmosphere in tons per square mile.

Concentration of Smoke and Sulphur Dioxide by the Volumetric Method.—Information recorded by the apparatus previously referred to is given in the following table:—

1951	SMOKE		SULPHUR DIOXIDE	
	Milligrams per 100 cubic metres		Milligrams per 100 cubic metres	
	Monthly Average	Highest Daily Average	Monthly Average	Highest Daily Average
January ..	90·1	154·0	87·8	160·7
February ..	75·5	128·0	68·6	104·7
March ..	60·0	138·0	52·3	110·4
April ..	41·0	115·0	17·8	39·0
May ..	17·0	32·0	13·3	22·5
June ..	20·0	38·0	9·0	16·1
July ..	22·0	38·0	7·7	14·8
August ..	21·0	37·0	7·4	11·8
September ..	23·0	59·0	8·4	11·8
October ..	47·0	166·0	18·8	46·2
November ..	37·0	72·0	47·4	79·7
December ..	40·0	103·0	76·6	247·6

The following table shows the work of the sanitary inspectors in connection with smoke abatement during 1950 and 1951:—

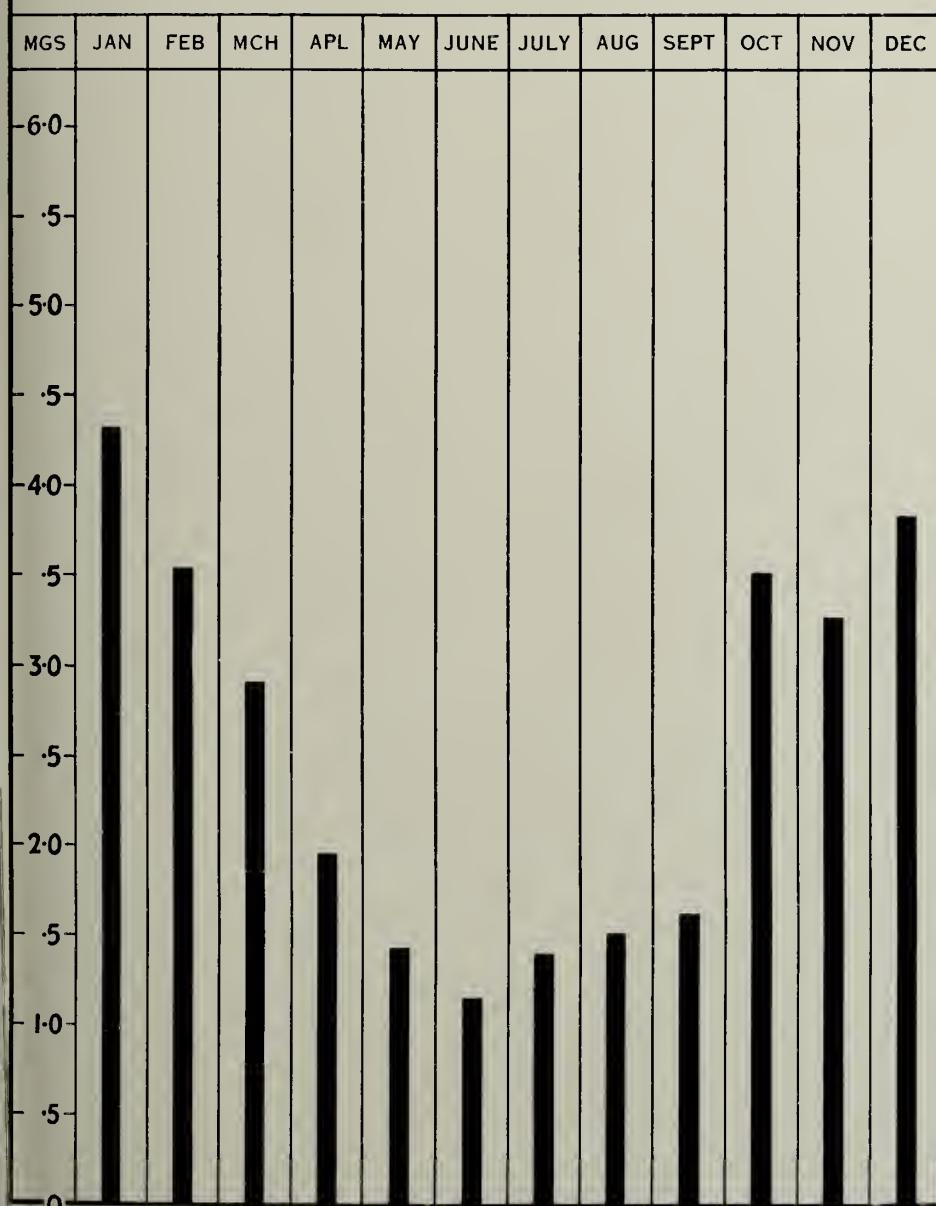
		1950	1951
Smoke observations ..	.. ..	410	546
Grit deposit records ..	.. ..	26	18
Boiler plant inspections ..	.. ..	70	84
Visits for enquiry ..	.. ..	192	174
Furnaces newly provided ..	.. ..	1	1
Furnaces altered, repaired or renewed ..	.. ..	9	5
Chimneys newly erected ..	.. ..	—	2
Chimneys extended or improved ..	.. ..	—	2
Firms adopting smokeless fuel ..	.. ..	—	—
Notices served ..	.. ..	27	37

The analysis of the matter collected in the Deposit Gauges and of the Lead Peroxide Cylinders is carried out in the laboratory of the Public Analyst, Mr. C. H. Manley, M.A., F.R.I.C.

Information was laid and summonses served on one firm in respect of smoke nuisances, in consequence of which plans and proposals were submitted and accepted for the installation of new fuel burning appliances and a new chimney.

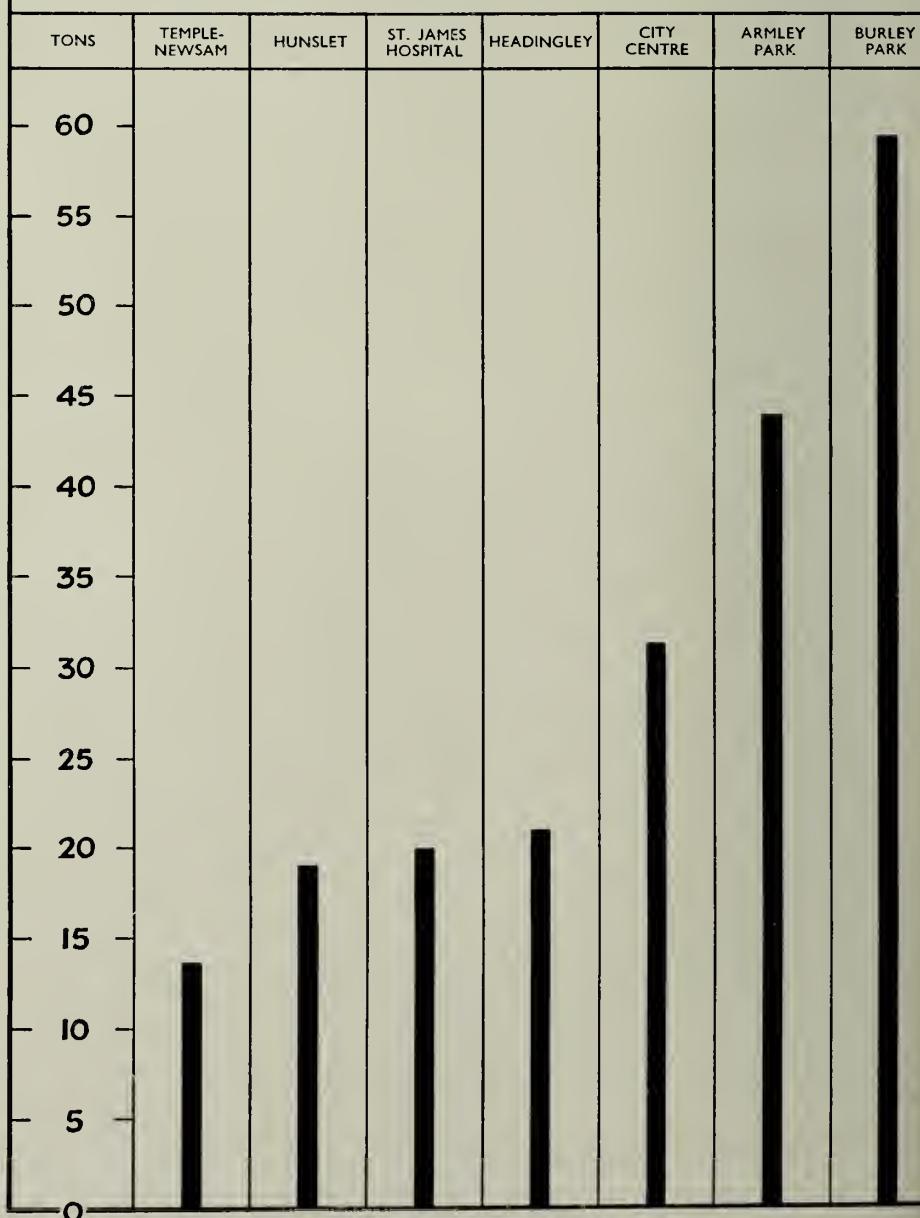
SULPHUR EMISSION—1951

AMOUNT OF SO₂ IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETRES
MONTHLY AVERAGE OF ALL STATIONS



SOLID DEPOSIT—1951

AVERAGE MONTHLY DEPOSIT IN TONS PER SQUARE MILE



ESTIMATION OF ATMOSPHERIC SULPHUR POLLUTION BY LEAD PEROXIDE METHOD.
(Weight of SO₃ calculated per 100 square centimetres of exposed fabric in milligrammes per day.)

STATIONS.

Period.	St. James's Hospital								
	Headingley		City Centre		Hunslet		Templenewsam	Armley Park	St. James's Hospital
	1950	1951	1950	1951	1950	1951	1950	1951	1951
January ..	3·43	3·80	4·53	5·80	4·66	4·60	3·17	3·50	4·27
February ..	4·00	2·93	4·68	3·78	3·48	3·43	3·27	4·28	3·60
March ..	3·05	2·05	4·62	3·87	3·92	3·32	3·09	2·13	3·42
April ..	1·70	1·41	2·13	2·37	2·56	1·95	1·87	1·43	3·48
May ..	1·05	0·94	2·41	1·62	3·00	2·00	1·19	0·82	2·40
June ..	1·32	0·88	2·12	1·40	1·47	1·35	1·33	1·01	2·41
July ..	1·09	1·32	1·68	1·80	1·23	1·28	—	1·28	2·25
August ..	1·31	1·36	1·85	1·91	1·42	1·30	1·16	1·59	2·06
September ..	2·03	1·46	1·57	1·76	1·44	1·59	1·74	1·48	1·83
October ..	2·76	3·00	4·00	4·00	3·00	3·60	2·15	2·86	1·14
November ..	3·87	2·40	5·27	4·00	5·19	3·30	3·57	3·00	1·13
December ..	2·53	3·10	4·21	5·50	4·41	3·30	2·68	3·60	1·74
Monthly Average	2·34	2·05	3·25	3·15	2·98	2·58	2·10	2·16	2·79
									2·61
									3·03
									2·68

DEPOSIT GAUGES.
MONTHLY DEPOSIT IN ENGLISH TONS PER SQUARE MILE.
YEARS 1950 AND 1951.

146

Period.	STATIONS													
	Headingley		City Centre		Hunslet		Templenewsam		Armley Park		St. James's Hospital		Burley Park	
	1950	1951	1950	1951	1950	1951	1950	1951	1950	1951	1950	1951	1950	1951
January ..	8·44	31·15	18·44	49·97	9·00	26·74	7·01	14·79	22·43	49·62	11·87	28·87	34·13	96·10
February ..	33·12	33·48	44·64	42·93	26·30	18·48	20·01	12·14	59·92	63·47	25·67	24·87	127·80	118·32
March ..	12·19	23·20	23·03	50·00	14·95	22·79	13·06	17·40	28·51	56·72	13·69	22·17	30·09	62·20
April ..	15·55	13·68	33·52	28·45	15·52	20·36	13·23	11·07	35·87	40·66	13·79	17·93	34·25	38·42
May ..	12·12	12·66	23·59	28·85	15·71	15·95	11·22	10·14	38·44	69·79	11·12	11·18	23·20	48·09
June ..	12·70	9·52	31·93	19·42	17·13	16·18	10·87	10·45	19·42	38·59	13·52	*	57·20	26·04
July ..	17·41	24·28	27·02	30·26	18·36	28·68	13·82	17·43	24·69	57·31	14·90	*	66·25	66·04
August ..	19·23	30·66	28·17	29·10	19·41	17·12	12·45	16·23	40·79	36·11	29·99	17·90	62·62	46·17
September ..	15·15	15·37	32·60	28·60	12·46	15·54	11·55	10·49	21·40	29·78	17·56	15·99	54·66	37·99
October ..	12·11	13·09	29·59	23·56	15·99	16·63	9·17	10·49	31·58	38·69	15·37	16·65	47·48	32·10
November ..	20·42	20·95	45·84	37·84	18·96	16·91	11·45	14·13	137·90	27·97	20·25	21·88	78·96	51·43
December ..	16·91	*	40·20	34·99	22·52	14·61	13·78	17·56	33·96	24·15	18·15	22·46	47·92	91·43
Total deposit for year ..	195·35	228·04	378·57	403·97	206·31	229·99	147·62	162·32	494·91	532·86	205·88	199·00	664·56	714·33
Monthly Average	16·28	20·73	31·54	33·66	17·19	19·16	12·30	13·52	41·24	44·40	17·15	19·90	55·38	59·52

*Bottle broken

DEPOSIT GAUGES RECORDS, 1926-1951.
ENGLISH TONS PER SQUARE MILE PER ANNUM.

147

		STATIONS.				St. James's Hospital
	Headingley	City Centre	York Road	Hunslet	Temple-newham	Armley Park
1926	..	98.02	307.7	* 288.1	362.8	..
1927	..	* 133.5	354.5	391.9	301.2	..
1928	..	141.9	349.2	319.5	* 61.2	..
1929	..	* 108.4	321.0	302.6	305.4	* 80.4
1930	..	123.9	344.3	299.5	290.5	101.8
1931	..	126.5	336.2	* 266.9	268.5	109.3
1932	..	105.8	320.7	264.7	255.6	87.5
1933	..	107.86	305.0	277.83	* 276.32	* 81.59
1934	..	124.28	341.7	284.74	294.49	86.24
1935	..	* 131.92	358.88	321.25	* 317.55	* 108.67
1936	..	136.95	381.40	301.89	290.13	* 118.20
1937	..	135.93	* 331.53	325.35	* 301.71	* 123.39
1938	..	* 119.80	359.51	289.56	* 231.39	133.37
1939	..	155.32	314.96	* 255.15	* 234.74	122.67
1940	..	1186.30	1413.29	* 1247.36	* 1279.58	* 1243.33
1941	..	* 188.31	* 285.51	* 129.75	* 301.31	* 164.21
1942	..	* 138.21	* 371.14	..	* 235.37	* 159.03
1943	..	186.93	389.03	..	271.82	171.43
1944	..	175.37	374.50	..	* 277.14	* 114.80
1945	..	* 151.29	* 288.44	..	* 262.11	* 139.27
1946	..	* 146.50	326.26	..	* 267.10	* 166.64
1947	..	* 121.94	288.76	..	* 209.66	* 307.06
1948	..	162.78	338.02	..	213.49	* 134.68
1949	..	181.24	411.91	..	225.68	164.28
1950	..	* 195.35	378.57	..	206.31	147.62
1951	..	* 228.04	403.97	..	229.99	162.32

* 9 months
† 11 months
‡ 8 months
§ 5 months

* 10 months
† 10 months
‡ 7 months

* 11 months
† 11 months
‡ 8 months

* 9 months
† 11 months
‡ 8 months

UNFIT HOUSES

BY

H. P. GILL,
Supervisory Housing Inspector.

Number of Houses.—The total number of houses and flats in the city on 31st December, 1951, was 157,466, made up of 58,597 back-to-back houses and 98,869 through houses and flats.

New Houses.—The number of permanent new houses and flats completed during the year was 1,020. No temporary houses were erected during the year but 24 houses were converted into 69 self-contained flats and 3 other buildings into 3 dwelling-houses.

Housing Shortage.—The number of applications for houses standing on the registers at the Housing Department on 31st December, 1951, was 29,273, of which 22,745 were regarded as inadequately housed.

Overcrowding.—Overcrowding shows little signs of improvement and only the gravest cases can be dealt with.

HOUSING ACT, 1936, PART IV.—OVERCROWDING.

January 1st to December 31st, 1951.

	1950	1951
Number of cases of overcrowding discovered in houses owned by the Corporation	118	104
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	107	118
Number of overcrowding cases relieved during the year in course of slum clearance operation .. ..	..	..
Number of cases of overcrowding relieved during the year in course of action under S.S.II and 12	23	40
A. No. of dwellings known to be overcrowded at the end of the year	2,776	3,016
B. No. of new cases of overcrowding reported during the year	940	755
C. No. of cases of overcrowding relieved during the year ..	961	515
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	37	37

There are 27,313 occupied dwellings on the Municipal Estates in the city and the average percentage of overcrowding during the year was 2.33.

397 families that were living in overcrowded privately owned houses have been rehoused during the year; 395 of these families have been accommodated in Municipal dwellings and two families in requisitioned dwellings.

There has been one application for a licence to permit temporary overcrowding during the year.

During the year 34 new cases of overcrowding were reported to the Housing Department.

The number of certificates of permitted numbers issued during the year was 355, making a total of 89,130 certificates issued since the Act became operative.

Unfit Houses.—During the year 22,516 dwelling-houses were surveyed and examined and 8,829 nuisances and housing defects were remedied. Houses numbering 5,476 found to be defective in one respect or another under the Public Health Act, 1936, were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1936, and found not to be in all respects reasonably fit for human habitation was 173; 81 were repaired in response to notices served under this Act.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to 16 houses under the Housing Acts at a cost of £403 os. 8d. and to 53 houses under the Public Health Acts at a cost of £266 9s. 11d. these amounts being recovered from the owners of the properties concerned.

Demolition of Insanitary Houses.—The deterioration in the condition of the older type of house has continued but fewer acutely and structurally dangerous ones have been discovered. Serious disrepair is becoming an increasing factor in deciding the need for formal representation of unfitness leading to Demolition Orders. During the year attention has had to be given to the large number of houses in the city which had been abandoned by the owners and had fallen into a derelict and ruinous condition, many of them being in a dangerous state. It was found necessary to make official representations of unfitness in respect of 63 such houses. The condition of some of these houses is illustrated in the photographs opposite pages 150 and 151.

The number of Demolition Orders made during the year was 214.

The number of houses demolished in pursuance of Demolition Orders was 114. In addition 7 houses situated in pre-war Clearance Areas were demolished during the year and a further 6 houses were found to have been demolished by the owners, making a total number of houses demolished during the year of 127.

The owners of 37 houses which were the subject of Demolition Orders were notified that the demolition of the premises should not be commenced until they had been disinfested. This work is done by the Disinfestation Section of the Department when the houses have been vacated.

In certain areas of the city much malicious damage is done to houses standing empty or awaiting demolition by the youth of the neighbourhood. It is common practice for all lead and other metals to be removed from a house within a short time of the tenant leaving. Timbers are removed also and brickwork disturbed so that the house rapidly becomes a source of danger to children. Difficulty is also experienced with the disturbance of demolished sites and scattering of debris on the public pavements.

On appeal to the County Court, the Demolition Order made on a house in the Servia Road district was quashed, the Judge accepting from the owner an undertaking not to allow the premises to be used for human habitation.

A Demolition Order was sought on a house and the owner applied for change of user to enable the premises to be used as a store. This was granted and no further action to make a Demolition Order was taken.

Clearance Areas.—*Skinner Lane Clearance Areas Nos. 1 and 2.*—No objections were received against the Compulsory Purchase Orders in respect of the two small Clearance Areas in Skinner Lane. An inspector from the Ministry of Local Government and Planning visited and inspected the Areas. The Minister confirmed the Compulsory Purchase Orders as represented.

Upper Carr Place Unhealthy Areas Nos. 1, 2, 3 and 4.—A further inspection of these Areas revealed that, notwithstanding the fact that Demolition Orders had been obtained on five houses, the condition of the remaining thirty houses was such as to require



2, NORTHFIELD VILLAS
Basement used as a combined room by a woman with two children, showing ruinous and damp conditions. Note dangerous brick and flag floor. Subject of Closing Order, October, 1951.



6 AND 8, OLD HALL STREET AND 11, GIBSON STREET.
Block of one derelict and two occupied houses showing dilapidated condition of derelict portion. Dealt with by Demolition Order, September, 1951.



REAR OF 12, GLOVER STREET.

Derelict house being used as a dumping ground for offensive refuse. Demolition Order made October, 1951.



16 AND 18, STAMFORD STREET.

Part of a block of five such houses, rat-infested and extremely dilapidated, used as a refuse tip by many persons in the district. Demolition Order made October, 1951.

action to secure the clearance of the whole Areas. An official representation of unfitness was made and the Council subsequently decided to seek Compulsory Purchase Orders on the Areas.

It is becoming more and more evident that the treatment, as individually unfit, of the worst of the houses in an area of houses of similar age and type should be supplemented by Clearance Area procedure on all the houses as it is only a matter of time, following the demolition of the more dangerous ones, that action is needed against other houses in the same area. Consideration should, therefore, be given to the provision of an additional allocation of houses for this purpose.

The table below gives a summary of action under Sections 11 and 12 of the Housing Act, 1936.

		1949	1950	1951
No. of houses represented for demolition		149	183	214
No. of Demolition Orders made		127	193	214
No. of families concerned		108	158	159
No. of persons concerned		360	521	538
No. of dwellings represented for closing		8	28	12
No. of Closing Orders made		5	27	14
No. of families concerned		5	26	13
No. of persons concerned		15	84	47
No. of undertakings accepted from owners ..		3	1	1
No. of houses demolished (S.11)		110	119	114
No. of houses and rooms closed (S.12) ..		5	9	22
No. of families re-housed by Corporation at 31.12.51 ..		93	94	181
No. of families awaiting re-housing at 31.12.51 ..		41	126	67
No. of families who found own accommodation ..		13	13	29
No. of families required to find own accommodation ..		15	5	1
No. of families where orders for possession obtained ..		..	1	..
No. of houses referred for opinion but not represented ..		109	263	270
No. of dwellings represented which stood in Slum Areas		102	183	150
No. of houses represented which were dangerous ..		67	122	120
No. of families which re-occupied houses where Demolition or Closing Orders were operative ..		..	3	2
Analysis of houses on which Demolition or Closing Orders were made which were occupied by more than one family or were derelict or unoccupied.				
No. of families	No. of houses	Derelict	Unoccupied	
1	225	63	2	
3	1			
4	2			

HOUSING ACT, 1936

Table showing the number of houses examined by the Medical Officer of Health as part of the general survey of the city during the year ended December 31st, 1951, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts, with the corresponding figures for 1949 and 1950.

		1949	1950	1951
Number of new houses erected during the year		1,473	1,311	1,020
(i) By the Local Authority		1,407	1,190	836
(ii) By other bodies and persons		66	121	184
1. Inspection of dwelling-houses during the year.				
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made		17,025	20,846	22,516
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made		896	760	698
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation		157	209	217
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation		403	205	160
2. Remedy of Defects during the year without Service of Formal Notices.				
Number of defective dwelling-houses rendered fit in consequence of informal action		3,500	4,696	3,983
3. Action under Statutory Powers during the year.				
A.—Proceedings under Section 9 of the Housing Act, 1936.				
(1) Number of dwelling-houses in respect of which notices were served requiring repairs		106	118	106
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—				
(a) By owners		56	58	45
(b) By Local Authority in default of owners		7	22	16
B.—Proceedings under the Public Health Acts.				
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied		2,185	2,111	2,040
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—				
(a) By owners		1,361	1,353	1,513
(b) By Local Authority in default of owners		32	37	53
C.—Proceedings under Sections 11 and 12 of the Housing Act, 1936.				
(1) Number of dwelling-houses in respect of which				
(a) Demolition Orders were made		127	193	214
(b) Closing Orders were made		5	27	15
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders		110	119	114

GENERAL SANITATION

Water.—During the year 433 samples of drinking water were taken by the Department for bacteriological examination. Of these samples, 427 were taken from the Corporation's main supply at different points in the city. Only 8 of these 427 samples of town's water were unsatisfactory and these were mainly due to minor defects or the need of main flushing and subsequent samples from the same sources proved satisfactory.

Water Supply.—(*Report of Mr. Kenneth L. Forster, General Manager and Engineer of the Waterworks Department.*)

The water supply of the city and its several parts during the year 1951 has been (a) satisfactory in quality although in April, May and June there were taste troubles due to excessive growths of diatoms in the storage reservoir at Eccup, and (b) satisfactory in quantity.

Plumbo-solvency.—Water leaving the storage reservoir at Eccup for the Headingley Filtration Works is treated with lime at the rate of 5 p.p.m. approximately, with the object of producing in the treated water going into supply after filtration and chlorination, a pH between 7.0 and 7.2 and an alkalinity of approximately 20 p.p.m. CaCO_3 .

Determinations are made of pH daily and alkalinity weekly on samples of water from all mains leaving the filtration works and examination to determine whether traces of lead are present is included in every analysis. In no case during 1951 has a measurable quantity been found.

On occasions when pH and alkalinity have fallen below the standard aimed at, samples of water going to supply have been tested for plumbago-solvent action but all samples have been satisfactory in this respect.

Action in respect of any form of contamination.—In August samples taken from premises in the near neighbourhood of the Medical School were found to be unsatisfactory and these findings were confirmed by samples taken from two mains, one 3 in. and one 4 in., supplying the Medical School, both of which showed heavy pollution. Water samples from the trunk mains supplying these distribution mains were satisfactory. The polluted mains were isolated and Chloros was injected under pressure to give a chlorine residual of 5 p.p.m. This was maintained for 1 hour and the heavily

chlorinated water was then run off. Follow-up samples from the affected premises were all satisfactory. Additional chlorination at Woodhouse Reservoir has maintained an increased free chlorine residual in the mains supplying this area and no further unsatisfactory samples have been obtained. It is felt that the contamination in this case was of purely local origin and could in no way be attributed to the public supply.

The following table is a summary of the results of chemical analyses and is followed by a summary of the bacteriological examinations made of raw water and water going into supply after filtration and chlorination.

SUMMARY OF ANALYSES OF THE PUBLIC WATER SUPPLY FOR THE YEAR ENDED DECEMBER 31ST 1951. SUMMARY BASED ON 204

ANALYSES OF SAMPLES OF WATER FROM THE PUBLIC SUPPLY

	Parts per million except where otherwise stated		
	Year ended December 31st, 1951		
	Average	Maximum	Minimum
*Turbidity (Silica scale)	Less than 2	12	Less than 2
*Colour—Hazen Units	18	48	5
*pH.	7.2	8.2	6.7
Free Carbon Dioxide	1.75	2.0	1.3
Alkalinity (as Ca CO ₃)	18.5	21.5	16.5
Total Hardness (as Ca CO ₃)	54.5	58.0	50.0
Permanent Hardness (as Ca CO ₃)	36.0	39.5	32.5
Oxygen absorbed from Permanganate— 4 hours at 27°C.	2.25	3.8	1.3
Nitrogen present as free and saline Ammonia	0.040	0.104	Nil
Nitrogen present as 'Albuminoid' Ammonia	0.044	0.084	0.016
Nitrogen present as Nitrites (N)	Nil	Nil	Nil
Nitrogen present as Nitrates (N)	0.26	0.40	Nil
Chlorine present as Chloride (Cl)	11.8	13.0	11.0
Sulphate (as SO ₄)	28.0	29.1	20.6
Silica (as SiO ₂)	6.0	7.0	5.5
Fluorine (as F)	Nil	Trace	Nil
Calcium (as Ca)	12.5	12.6	12.1
Magnesium (as Mg)	6.1	6.5	5.6
Iron (as Fe)	Nil	trace	Nil
Manganese (as Mn)	Nil	Nil	Nil
Lead (as Pb)	Nil	Nil	Nil
Total solids dried at 180°C.	101.0	106.0	94.0
*Electric conductivity—Micro-ohms/ CM ₃ at 20°C.	128	135	118
*Residual chlorine	0.08	0.47	Nil

*Summary based on daily determinations on samples taken from sampling taps on distribution mains supplying all parts of the city.

SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Headingley Filtration Works					No. of samples	Average Count
Presumptive Coliform in 100 ml.	..	..	..	..	370	160
Typical B.Coli in 100 ml...	..	..	..	..	370	111
Cl. Welchii in 40 ml.	..	..	..	..	97	2
Agar plate count 48 hours at 37°C. Colonies per ml.	..				51	19
Agar plate count 72 hours at 22°C. Colonies per ml.	..				51	140

WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION						
No. of samples	Ministry of Health Classification					
	Class 1	Class 2	Class 3	Class 4		
1,617	98.9%	0.75%	0.25%	0.1		

Particulars of the number of dwelling-houses and the number of the population supplied from public water mains.—(a) Number of dwelling-houses within the Statutory Area of supply—162,109. (b) Population supplied from public water mains: (i) direct to houses—503,030, (ii) by means of stand-pipes—none.

Sewage Disposal.—The Sewerage Engineer states that there is still great delay in obtaining parts for replacements and undoubtedly the pressure of the armament programme and the re-imposition of the control of iron and steel will make things more difficult. About 11 per cent. of the bacteria beds are out of action awaiting repairs.

There has not so far been any deterioration in the quality of the effluent. In fact, the figures show a slight improvement.

The average analyses figures of the final effluent at Knostrop Sewage Works from 1st April, 1951, to 19th March, 1952, were:—

Oxygen absorbed in 4 hours ..	1.90	parts per 100,000
Suspended solids	3.1	" "

These figures are the average of 47 samples.

Public Cleansing.—The Director of Public Cleansing gives the following particulars of refuse collection and disposal:—

	Tons
Household refuse and nightsoil collected during 1951	140,826
(a) Dealt with at destructors	92,282
(b) Dealt with at tips and for agricultural purposes	48,544

The quantity of refuse dust extracted during mechanical separation:—

	Tons
(a) Sold to farmers for agricultural purposes	19,213
(b) Used as covering at refuse tips	14,083

Dustbins and Ashpits.—The number of dustbins provided by the Cleansing Department and delivered to dwelling-houses in Leeds during the year was 11,111. The total number provided since the inception of the scheme in December, 1946, was 62,600.

During the year 127 ashpits were abolished and the Corporation approved grants-in-aid amounting to £499 os. 4d. in connection with the abolition of these ashpits and the provision of 502 dustbins in lieu.

Keeping of Animals.—The number of pig-keepers in the city decreased to 243. The number of pigs kept was 5,114, being an increase as compared with the previous year.

Many complaints of alleged nuisance were received and 913 visits of inspection were made to pig styries; the keeping of poultry and other animals was investigated in 217 cases.

The photograph opposite illustrates pig-keeping under bad conditions causing nuisance and the same piggery is shown photographed after action by the Sanitary Inspector to enforce compliance with the pig-keeping byelaws.

Ringworm Investigation.—In conjunction with the Department of Dermatology at the Leeds General Infirmary, the investigation into cases of ringworm in children where it was thought that the ringworm was of feline or canine origin has continued during the year. The suspected animals, 22 cats and 14 dogs, were collected and examined in a dark room under ultra-violet radiation behind a fluorescence filter at the Stanley Road Disinfecting Station. Of the animals examined 7 cats and 2 dogs were found to be infected. Each case is investigated by the district sanitary inspector to ascertain any possible source of infection.

Closet Accommodation.—During the year 5 privies and 2 pail closets were abolished. The Corporation made contributions of £160 os. 8d. in respect of the 5 privies and one of the pail closets.

During the year 22 trough closets were converted into pedestal water-closets. These closets served 41 dwelling-houses and one factory.

Grants amounting to £356 18s. 6d. were paid to the owners of the properties concerned, being three-quarters of the cost of the conversion to pedestal water-closets.



PIGKEEPING—BAD CONDITIONS.

Dilapidated styes, overflowing manurestead, swill in uncovered containers and strewn on ground, yard littered with varied impediments. All these conditions were conducive to nuisance and rat infestation. Rats had become so much a problem as to have endangered stability of the adjoining railway embankment.



PIGKEEPING—BYELAW STANDARDS.

Moderate structural improvements effected, but mainly as result of orderly and cleanly working, nuisance minimised and rat infestation controlled. Fuel economy results from construction of a simple 'boiler-house.'

A large number of informal notices was served on owners of property in connection with closet accommodation and in 200 cases statutory notices had to be served. In the owner's default the water-closet appurtenant to one house was repaired at a cost of £25 and this amount was recovered from the owner concerned.

Removal of Offensive or Noxious Matters.—Contraventions of the byelaws relating to the removal of offensive or noxious matters occurred in 21 cases and were dealt with.

Offensive Trades.—The number of premises in the city where offensive trades are carried on is 113. During the year 30 visits of inspection were made.

Common Lodging-Houses.—During the year 406 routine visits were made to common lodging-houses.

Houses-let-in-Lodgings.—The total number of visits paid to houses of this type was 1,665. Informal action was taken in 30 cases, whilst 38 statutory notices had to be served.

Cellar Dwellings and Underground Sleeping Rooms.—During the year 101 visits were paid to underground sleeping rooms.

Tents and Vans.—There were no applications received under Section 269 of the Public Health Act, 1936, for licences to erect or station and use moveable dwellings.

Vigilance was exercised to ensure that no unauthorised land was used as a camping ground and 1,962 visits of inspection were made to tents, vans or sheds.

Canal Boats.—The number of canal boats on the register at the end of the year was 124; periodical visits of inspection were made to wharves and locks and a complete inspection was made of 396 boats.

Public Conveniences.—Repairs to the six principal conveniences with attendants were carried out to a total cost of £169 10s. 6d. The repairs carried out to the unattended conveniences amounted to £531 3s. 9d. of which over half was expenditure in connection with repairs necessitated by wilful damage.

Public Sewers.—During the year 292 public sewers, affecting 1,123 houses or other premises, were cleansed at a cost to the Department of £640 12s. 9d. Works of repair or maintenance were carried out to 56 defective public sewers, affecting 226 houses or other

premises, and the cost of this work, amounting to £576 16s. 1d. was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 1,764 drain tests, 292 of these being new drains relaid in place of those found defective. A large number of informal notices was served on owners of property for drainage repairs and in 642 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains or other appliances of 52 houses were repaired or renewed by the Department in default as a matter of urgency at a cost of £241 9s. 11d. which was recovered from the owners concerned.

Removal of Persons in need of care and attention (Section 47, National Assistance Act, 1948).—Fifty-nine cases of persons alleged to be living in insanitary surroundings were brought to the notice of the Department.

In six cases certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948; five persons were admitted to hospital and one person was received into the care of the Welfare Services Committee at South Lodge, no Court proceedings being necessary.

Of the remaining 53 cases, 22 were found not to come within the provisions of Section 47 and 31 were admitted to hospital by arrangement with the Regional Hospital Board.

Articles exchanged for Rags.—The number of offences against Section 154 of the Public Health Act, 1936, which places restrictions on articles exchanged for rags, slightly increased during the year. Seven rag and bone dealers were warned in this connection. Twelve persons were prosecuted for offences; one was fined 10s., six were fined 20s., one 30s., one 40s., one 60s., one 100s., and two were given a conditional discharge.

District Inspection and Investigation of Complaints.—The total number of houses surveyed and examined was 22,516. The number of complaints investigated during the year was 8,886 and 9,352 nuisances and housing defects were remedied.

The tables on the following pages give details of the work done by Sanitary Inspectors in 1951.

Notices.—The number of informal notices served in relation to Public Health Act matters was 4,409 and statutory notices served in this connection numbered 1,892.

WORK DONE BY SANITARY INSPECTORS, 1951.

ANALYSIS OF INSPECTIONS	North Div.	South Div.	East Div.	West Div.	Factories Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses	(b) Rodent	Food and Dairies	Total
DWELLINGS.										
1. Houses fit in all respects	132	42	2	103	..	20	..	..	..	299
2. Houses unfit and capable of repair	36	78	36	20	..	3	..	..	..	173
3. Houses unfit and incapable of repair	118	34	40	24	..	770	..	..	..	986
4. Underground dwellings and parts of buildings	7	2	28	25	..	39	..	..	..	101
5. Houses for drainage	2,545	4,146	2,371	1,770	..	..	..	..	..	10,832
6. Houses for ashes accommodation	778	2,461	735	390	..	..	..	..	..	4,364
7. Houses for closet accommodation	722	1,756	986	145	..	..	..	..	..	3,609
8. Houses for complaints and defects	1,993	3,070	1,909	1,914	..	..	..	..	..	8,886
9. Houses for infectious diseases	31	17	11	2	..	..	(a)	2	..	63
10. Houses for overcrowding .....	..	92	134	219	121	..	..	..	..	566
11. Houses for filthy conditions	62	88	130	44	..	..	(a)	4	..	328
12. Houses for verminous conditions	113	120	241	46	..	..	(a)	1	..	521
13. Housing re-inspections	3,079	6,338	4,734	3,140	..	2,364	(a)	48	..	19,703
14. Houses let in lodgings	499	1	4	103	..	66	..	..	..	673
15. Separate dwellings within houses let in lodgings .....	..	476	2	28	192	..	294	..	..	992
16. Common lodging houses .....	..	1	..	..	8	..	1	(a)	396	406
17. Canal boats .....	..	..	..	..	..	..	(a)	396	..	396
18. Sites for tents, vans, sheds, etc. ....	..	..	1	..	1	..	(a)	157	..	159
19. Tents, vans or sheds .....	..	..	..	..	4	..	(a)	1,958	..	1,962
20. Other visits not included above .....	..	452	515	484	402	..	1,106	(a)	482	3,441
FOOD AND DRUG PREMISES										
21. Dairies .....	..	3	1	..	1	..	..	..	713	718
22. Bottled Milk Stores .....	..	..	2	6	1	..	..	30	..	39
23. Ice-cream .....	..	86	307	357	171	..	..	..	..	921
24. Fried Fish .....	..	146	574	339	333	..	..	..	..	1,302
25. Pickles and sauces .....	..	1	6	10	7	9	..	..	..	33
26. Sausages and pork products .....	..	9	61	78	73	38	..	..	..	259
27. Other registered premises .....	..	6	3	42	24	24	..	..	..	99
28. Bakehouses .....	..	99	254	238	309	96	..	2	..	998
29. Butchers .....	..	38	219	213	117	9	..	..	192	788
30. Provision merchants .....	..	14	98	41	5	16	..	..	231	405
31. Restaurants, cafes, kitchens .....	..	5	5	14	..	1,418	..	..	..	1,442
32. M.O.F. Depots .....	..	1	1	..	..	..	..	5	..	25
33. Other food premises .....	..	75	231	386	136	274	..	..	177	1,279
34. Visits for enquiry .....	..	6	45	177	22	270	..	..	133	653
TRADES AND BUSINESSES.										
35. Factories with mechanical power .....	..	..	5	1	..	2,576	..	..	..	2,582
36. Factories without mechanical power .....	..	..	..	1	..	153	..	..	..	154
37. Other premises, constructional works, etc. ....	..	..	1	3	..	3	..	..	..	7
38. Workplaces .....	..	..	15	2	..	488	..	..	..	505
39. Shops .....	..	12	12	50	..	902	..	..	141	1,117
40. Outworkers .....	..	..	..	..	..	288	..	..	..	288
41. Offensive trades .....	..	..	19	..	11	..	..	..	..	30
42. Visits for enquiry .....	..	..	5	3	..	746	..	..	..	754
SMOKE ABATEMENT.										
43. Smoke observations .....	..	39	54	17	50	386	..	..	..	546
44. Grit deposit records .....	..	..	2	..	13	3	..	..	..	18
45. Boiler plant .....	..	..	19	..	1	64	..	..	..	84
46. Visits for enquiry .....	..	..	43	1	4	126	..	..	..	174
GENERAL.										
47. Rodent infestations .....	..	102	196	145	122	1	..	24,987	..	25,553
48. Railway stations .....	..	..	..	..	..	..	..	..	..	..
49. Farms .....	..	..	37	5	..	..	..	248	..	290
50. Cowsheds .....	..	..	..	12	..	..	..	..	..	12
51. Stables .....	..	7	38	29	8	..	..	..	..	82
52. Cattle Market .....	..	..	..	7	3	..	..	54	..	64
53. Pig Styes .....	..	29	155	81	160	..	..	488	..	913
54. Poultry and other animals .....	..	20	35	29	40	..	..	98	..	217
55. Water supply .....	..	105	117	76	71	..	..	..	..	369
56. Infirm and diseased persons .....	..	11	11	17	14	..	..	..	..	53
57. Watercourses, ditches .....	..	23	11	33	71	4	..	..	..	142
58. Culverts .....	..	..	1	6	15	3	..	..	..	25

* Includes 15,976 for sewer baiting

WORK DONE BY SANITARY INSPECTORS, 1951.—contd.

ANALYSIS OF WORK DONE	North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses	(b) Rodent	Food and Dairies	Total
59. Other nuisances	133	34	19	21			..	..	..	207
60. Public conveniences	304	279	434	349	1,081		..	..	..	2,397
61. Visits for enquiry	55	352	179	201	40		..	..	..	888
62. No access visits	1,021	652	1,099	837	214	66	(a)	16	104	4,009
63. Other visits (not included above)	60	72	66	149	88	..	..	..	481	916
REPAIRS AND IMPROVEMENTS.										
64. Roofs, valley gutters, flashings, etc.	223	362	396	269	2		(a)	1	..	1,253
65. Chimney stacks, flues, pots, etc.	77	103	93	71					..	344
66. Eaves spouts	197	364	204	72					..	887
67. Fallpipes	262	273	159	21	5					720
68. Walls, brickwork, pointing	124	182	115	92					..	513
69. Damp-proof courses provided	1	4	1	2					..	8
70. Dampness otherwise remedied	13	21	60	30					..	124
71. Wallplaster	31	137	80	79					..	327
72. Ceilings	12	48	59	26					..	145
73. Floors	12	39	28	21					..	100
74. Windows, frames, cords, etc.	42	164	91	58					..	355
75. Doors, door-frames	9	35	21	21					..	86
76. Ovens, fire-ranges, grates, etc.	43	115	68	60					..	286
77. Washing boilers, setpots, etc.	3	15	12	10					..	40
78. Sinks, lavatory basins, etc.	13	29	55	42					..	139
79. Waste pipes	44	48	79	51					..	222
80. Water supply provided	5	12	4	7					..	28
81. Food stores	10	1	3	5					..	19
82. Pavings, yards and passages	17	34	22	7					..	80
83. Repairs to water closets	124	270	247	115					..	756
84. New water closets provided	27	8	10	8					..	53
85. New pail closets provided .. .. ..	..	1	..	..					..	1
86. Trough closets abolished	12	..	7	..	3				..	22
87. Privy closets abolished .. .. ..	..	..	5	..					..	5
88. Pail closets abolished .. .. ..	..	1	1	..					..	2
89. Dustbins provided	86	201	48	88					..	423
90. Ashpits repaired	4	7	3	..					..	14
91. Sunken ashpits abolished	3	4	7	..					..	14
92. Other ashpits abolished	15	50	9	38	1				..	113
93. Other repairs to houses	94	31	46	11					..	182
94. Verminous houses disinfested	2	7	2	3					..	14
95. Dirty houses cleansed	7	10	46	1					..	64
96. Closets cleansed or limewashed	3	10	25	5					..	43
97. Underground dwellings made fit or closed .. .. ..	..	..	3	..					..	3
98. Other improvements to common lodging-houses .. .. ..	..	..	..	..	..	..	(a)	4	..	4
99. Other improvements to houses let in lodgings	2	..	..	..	..	..	(a)	..	..	2
100. Improvements to canal boats .. .. ..	..	..	..	..	..	..	(a)	6	..	6
101. Improvements to caravan sites .. .. ..	..	..	..	..	..	..	(a)	2	..	2
FOOD PREMISES.										
102. Walls, ceilings, floors, etc., repaired	5	121	34	9	50		..	..	..	219
103. Walls, ceilings, floors, etc., cleansed	7	189	60	12	106		..	..	..	374
104. Ventilation provided or improved	2	124	36	5	11		..	..	..	178
105. Articles, apparatus, clothing cleansed	1	59	15	1	12				..	88
106. Washing facilities provided	4	51	24	5	27				..	111
107. Washing facilities maintained .. .. ..	..	20	8	2	1				..	31
108. Other improvements	10	178	34	8	30				..	260
TRADES AND BUSINESSES.										
FACTORIES.										
109. Rooms cleaned .. .. ..	..	..	..	..	..	46		..	..	46
110. Rooms ventilated .. .. ..	..	..	..	..	..	2		..	..	2
111. Reasonable temperature secured .. .. ..	..	..	..	..	..	..		..	..	..
112. Overcrowding abated .. .. ..	..	..	..	..	..	2		..	..	2
113. Floors drained .. .. ..	..	..	..	..	..	..		..	..	..
114. Insufficient conveniences remedied .. .. ..	..	..	..	..	..	19		..	..	19
115. Unsuitable/defective conveniences remedied .. .. ..	..	..	..	..	..	696		..	..	696
116. Conveniences made separate for sexes .. .. ..	..	..	..	..	..	43		..	..	43
117. Other offences remedied .. .. ..	..	..	..	..	..	50		..	..	50
118. Absence of abstract noted .. .. ..	..	..	..	..	..	28		..	..	28

WORK DONE BY SANITARY INSPECTORS, 1951.—contd.

ANALYSIS OF WORK DONE		North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
TRADES AND BUSINESSES (continued)										
WORKPLACES.										
119. Rooms ventilated .....	..	..	..	..	..	3	..	..	..	3
120. Overcrowding abated .....	..	..	..	..	..	1	..	..	..	1
121. Rooms cleansed .....	..	..	..	..	..	2	..	..	..	2
122. Sufficient conveniences provided .....	..	..	..	..	..	2	..	..	..	2
123. Other defects remedied .....	..	..	..	..	..	32	..	..	..	32
SHOPS.										
124. Ventilated .....	..	..	..	3	..	..	..	..	..	3
125. Reasonable temperature secured .....	..	..	..	..	..	3	..	..	..	3
126. Sufficient conveniences provided .....	..	..	..	..	..	5	..	..	..	5
127. Lighting provided .....	..	..	..	..	..	4	..	..	..	4
128. Washing facilities provided .....	..	..	..	..	..	19	..	..	..	19
129. Meals facilities provided .....	..	..	..	..	..	..	..	..	..	..
130. Other defects remedied .....	..	..	..	..	1	23	..	..	..	24
OFFENSIVE TRADES.										
131. Bye-law offences remedied .....	..	..	..	..	..	..	..	..	..	..
132. Other improvements secured .....	..	..	..	..	..	..	..	..	..	..
SMOKE ABATEMENT.										
133. Furnaces newly provided .....	..	..	..	..	..	1	..	..	..	1
134. Furnaces altered, repaired or renewed .....	..	..	1	..	..	4	..	..	..	5
135. Chimneys newly erected .....	..	..	..	..	..	2	..	..	..	2
136. Chimneys extended or improved .....	..	..	..	..	..	2	..	..	..	2
137. Firms adopting smokeless fuel .....	..	..	..	..	..	..	..	..	..	..
GENERAL.										
138. Rodents caught, killed or poisoned .....	..	1	6	4	54	..	..	*^(b) 16,811	..	16,876
139. Premises cleared of rodents .....	..	..	12	2	..	..	..	(b) 30	..	44
140. Premises rendered rodent-proof .....	..	..	2	12	..	..	..	(b) 44	..	58
141. Farm improvements .....	..	..	..	..	..	..	..	..	..	1
142. Watercourses cleansed .....	..	..	..	1	..	..	..	..	..	..
143. Culverts cleaned or maintained .....	..	..	..	..	..	..	..	..	..	..
144. Poultry-house improvements .....	..	..	1	1	2	..	..	..	..	4
145. Pig-stye improvements .....	..	..	12	2	3	..	..	..	..	17
146. Offensive matter removed .....	..	7	12	24	..	2	..	..	..	45
147. Manure removed .....	..	1	10	5	2	..	..	..	..	18
148. Manure-steeds built or repaired .....	..	..	2	1	..	1	..	..	..	4
149. Public convenience repairs and painting .....	..	4	21	56	3	14	..	..	..	98
150. Other nuisances abated .....	..	3	8	7	4	9	..	..	..	31
DRAINAGE.										
151. Drains repaired .....	..	29	63	49	69	19	..	(a) 1	..	231
152. Drains relaid .....	..	43	67	39	13	3	..	..	..	165
153. New drains laid .....	..	21	16	15	2	6	..	..	..	60
154. Drains cleansed .....	..	152	333	244	111	75	..	(a) 1	..	916
155. Public sewers maintained .....	..	16	20	10	9	1	..	..	..	56
156. Public sewers cleansed .....	..	78	69	79	49	17	..	..	..	292
157. Ball and water tests .....	..	74	119	66	24	9	..	..	..	292
158. Other tests .....	..	295	485	284	351	57	..	..	..	1,472
159. Gullies renewed or provided .....	..	55	70	11	48	16	..	..	..	200
160. Soilpipes and ventilating pipes .....	..	25	32	11	14	4	..	..	..	86
161. Inspection Chambers .....	..	14	29	5	10	4	..	..	..	62
162. Cesspools repaired or provided .....	..	..	..	1	..	..	..	..	..	1
163. Cesspools emptied .....	..	..	..	..	1	..	..	..	..	1
164. Cesspools abolished .....	..	..	..	..	..	..	..	..	..	..

*Includes estimated kill of 9,890

RODENT CONTROL
BY
W. PICKLES,
Inspector in Charge of Rodent Control

Complaints.—During the year 1,204 complaints of rodent infestation were received, the number of rat infested premises being 863 and for mice infested premises being 341. The following table shows the number of complaints of rats and mice split into private dwellings and business premises.

RATS		MICE	
Private Dwellings	Business Premises	Private Dwellings	Business Premises
628	233	168	160
$\underbrace{628}_{861}$		$\underbrace{168}_{328}$	

In addition, 15 Local Authority properties to which the above designations are not applicable were also treated and work was carried out on certain lands for the extermination of rabbits with satisfactory results.

Inspections.—The number of inspections and visits made in connection with alleged or suspected rodent infestation was 25,554. This figure includes 15,796 inspections of Leeds Corporation sewer manholes.

Sewer Baiting.—This work continued throughout the year and sewers on new housing estates are being brought into the scheme and tested to ascertain the nature, if any, of any rat infestation. This has resulted in an increased number of inspections over the previous year.

Maintenance treatments have been proceeded with in the case of those manholes where takes have been recorded and adjoining manholes.

General.—Under the Prevention of Damage by Pests Act, 1949, the number of notices served was 19. In addition, 48 premises were proofed against rodents.

STAFF

There were no major staff changes during the year and the following officers continue to serve in Supervisory posts :—

Deputy Chief Sanitary Inspector Mr. W. F. Saxton

DIVISIONAL INSPECTORS.

Meat and Other Foods Division ..	Mr. D. Forbes
Food and Dairies Division ..	Mr. J. S. Lindley
Factories, Offices and Shops Division	Mr. J. H. Wyatt
Housing Division	Mr. H. P. Gill
Northern Division	Mr. W. Givens
Eastern Division	Mr. C. Busfield
Western Division	Mr. D. Bowers
Southern Division	Mr. A. O. Wheatley

The following members of the staff obtained examination successes :—

Inspector J. Norton	} Meat Inspectors Certificate of Royal Sanitary Institute.
„ K. Keighley	
„ J. S. Garforth	
„ S. H. Price	
„ L. Jaques	
„ R. Smith	

Inspector S. T. Aaron Smoke Inspectors Certificate
of Royal Sanitary Institute.

Inspector R. Smith Associate Membership of the
Institute of Sanitary Engineers.

It is with pleasure that I record the loyal and valued assistance rendered to me by Mr. W. F. Saxton, Deputy Chief Sanitary Inspector, and other members of my staff for their help and co-operation during the year.

**Report of the
City Analyst**

MUNICIPAL LABORATORY

BY

C. H. MANLEY, M.A., F.R.I.C., *City Analyst*,

The following is a summary of the analyses made during 1951 :—

Samples submitted by Public Health Department :—

Food and Drugs samples	2,197
Fertilisers and Feeding Stuffs	19
Rain Gauges	84
Sulphur Dioxide Tests	72
Other Samples	14
	<hr style="width: 10%; margin-left: 0; border: 0.5px solid black;"/>
	2,386

Samples submitted by other Departments :—

Baths Department	2
Central Purchasing Department	3
Civic Catering Department	1
Cleansing Department	3
Leeds "A" and "B" Hospital Management Committees	7
Police Headquarters	95
Waterworks Department	12
Weights and Measures Department	2
Works Department	4
	<hr style="width: 10%; margin-left: 0; border: 0.5px solid black;"/>
Total	129
	<hr style="width: 10%; margin-left: 0; border: 0.5px solid black;"/>
Total	2,515
	<hr style="width: 10%; margin-left: 0; border: 0.5px solid black;"/>

FOOD AND DRUGS

The table on pages 174 to 178 summarises the samples taken under the Food and Drugs Act, 1938, and the Defence (Sale of Food) Regulations, 1943.

The percentage of adulteration was 4·2 which compares very favourably with the figure of 3·8 for 1950, the lowest recorded for the city.

The tables on pages 126 and 127 list the summonses issued respecting those adulterated samples in respect of which legal proceedings were instituted.

Milk.—The average composition of the 1,857 samples analysed was as follows, the corresponding figures for 1950 and 1939 being given for comparison :—

	1951	1950	1939	Minimum require- ment
Non-fatty solids	.. 8·74%	8·72%	8·78%	8·50%
Fat	.. 3·71%	3·65%	3·71%	3·00%
Total Solids	.. 12·45%	12·37%	12·49%	11·50%

The adulteration figure was 2·8 per cent., this being the lowest yet recorded for Leeds. There has been a progressive improvement during the years 1949-1951, the figures for 1950 and 1949 being 3·4 per cent. and 4·2 per cent. respectively.

Of the 52 unsatisfactory samples, 29 contained added water, 9 were fat deficient, 8 were both watered and fat deficient, 5 contained dirt and one contained blood. The greatest proportion of added water found was 35 per cent. (No. 830/L) and the greatest fat deficiency 33·3 per cent. (No. 2/L). A sample taken a week later from the same source as the milk showing this high fat deficiency was found to have the regulation minimum fat content of 3·0 per cent. No legal action was taken. In the case of four other samples showing fat deficiencies of 5 per cent., 12 per cent., 8 per cent. and 22 per cent., proceedings were instituted and the producer granted a conditional 12 months discharge on payment of 2 guineas costs. He stated that as he thought the stripplings were dirty and unfit for consignment to the dairy supplied by him, he had given them to his cats from a quart jug! (Nos. 453/4/F and 464/5/F).

Of the watered samples No. 9/L contained 16·5 per cent. added water, this involving a £10 fine and £1 10s. costs. Eleven other milks (No. 227, etc.) contained added water ranging from 2·5 per cent. to 20 per cent.: in addition to £1 16s. costs, a fine of £5 on each charge was imposed or £55 in all.

In the case involving the two largest amounts of added water, viz. 23·5 per cent. and 35·0 per cent., equivalent to 2·3 gallons and 3·5 gallons in each of 9½ gallons of milk, the producer, who strenuously

denied addition of water on the farm, was ordered to pay £9 11s. costs (Nos. 821/L and 830/L) and given a conditional 12 months discharge. (No. 830/L was also 18·3 per cent. fat deficient, the low fat content of 2·45 per cent. being caused by the diluting effect of the large amount of added water present. Because of this fact no additional charge was instituted in respect of the fat deficiency).

Baking Powder (1).—(No. 280/F).—This informal sample contained only 7 per cent. available carbon dioxide instead of the legal minimum of 8 per cent. No action was taken.

Parkin Biscuits (1).—(No. 974/L).—A private purchaser complained of the unpleasant after-taste of these. Examination proved this to be due to the 7 per cent. fat present having become rancid.

Blackcurrant Cordial (1).—(No. 107/L) (*Formal*).—This sample contained more saccharin than permitted by the Soft Drinks Order, 1947/48, viz. 1 oz. instead of 7/8ths oz. per 10 gallons, the manufacturers consequently receiving a warning letter.

Dressed Crab (1).—(No. 72/L) (*Formal*).—This contained only 75 per cent. crab meat, this representing a 25 per cent. deficiency on a 100 per cent. minimum or a 16·7 per cent. deficiency on a 90 per cent. minimum, which is considered a reasonable standard in the absence of a statutory one.

Custard Powder (4).—One of these, a formal sample No. 475/L, consisted of a coloured and flavoured mixture of cornflour (maize starch) and potato starch, and not of cornflour, wheat flour and rye flour, as stated on the label. Accordingly, although it was a superior article to what it claimed to be, its sale constituted an offence against Section 1 (1) of the Defence (Sale of Food) Regulations, 1943, in that it bore a label which falsely described it. Actually, there is now no need for the makers of pre-packed custard powders to declare their composition, and enquiry elicited the fact that this particular consignment represented old stock upon which the Ministry of Food had permitted the labels to remain unaltered.

Dandelion and Burdock (1).—(No. 1112/L) (*Informal*).—A bottle of this drink was brought with the complaint that it tasted of carbolic acid. On examination it was found to possess a distinctly phenolic odour and to contain tar acids to the extent of 4 parts per million. It had almost certainly been put into a bottle which had previously contained disinfectant and been improperly cleansed. The manufacturers were accordingly warned.

Fish Paste (3).—One of the samples analysed (No. 72/L) contained only 32·5 per cent. fish as against a normal minimum of 65·0 per cent. and was therefore reported as being 50 per cent. deficient in fish. Proceedings were instituted under Section 3 of the Food and Drugs Act, 1938, alleging that the article was not of the quality demanded. The retailers concerned pleaded guilty, stating that the recipe had been modified without reference to the management. They were fined £5 and ordered to pay 2 guineas costs.

Horseradish Cream (3).—One of these, a formal sample (No. 301/L) was incorrectly labelled, the horseradish being placed first instead of second on the list of ingredients, and the vinegar fourth instead of first. The manufacturers were therefore informed that new labels bearing the names of the ingredients in their descending order must be affixed to the bottles in order that the requirements of the Labelling of Food Order, 1950, could be satisfied.

Instant Postum (1).—(No. 806/L) (*Formal*).—This was a brown sugary pre-packed powder sold without a statement of the actual ingredients, only the starting materials, viz. wheat, bran and molasses being named. In any case, the sugars should have been placed first and not last on the list. No action of any kind was taken in view of the fact that the material was found to be very old stock and attempts to obtain the product elsewhere were unsuccessful.

Ice-Cream (28).—(*Formal*).—Three proved unsatisfactory. One of these (No. 794/F) had an unpleasant after-taste suggestive of rancidity, which was traced to the skimmed milk powder used. The other two contravened the Food Standards (Ice-Cream) Order, 1951, No. 316/F containing only 3·6 per cent. fat and No. 674/F only 4·7 per cent. fat and 6·0 per cent. non-fatty milk solids, the respective minima required being 5·0 per cent. and 7·5 per cent. As both the manufacturers went out of business shortly after the sales no legal action was taken. The remaining 25 samples had fat contents ranging from 5·2 per cent. to 21·4 per cent. and it is very satisfactory to record that in 19 of these the fat exceeded 8 per cent.

Mint Jelly (2) (*Formal*).—One of these (No. 202/F) had its ingredients stated in the wrong order, the mint being placed first on the list instead of the fourth. The makers were warned.

Other cases involving incorrect labelling concerned formal samples of *Jellicup* (No. 110/L), *Pineapple Jellies* (No. 127/L) and

an informal sample of *Tea Saving Tablets* (No. 1100/L). In the latter case the caffeine citrate, which was the active ingredient, but which was necessarily present in much smaller proportion than the sodium bicarbonate, was placed first on the list, whereas it was the sodium bicarbonate that should have come first. As in the case of the horseradish cream, there seemed to be an aversion to place the active ingredient in a place other than the first, whereas it would always be legal to do this provided that its percentage were stated, and this seems to be the last thing which the majority of makers wish to do.

Kali (1) (No. 293/L) (*Formal*).—This was a non-effervescent powder consisting of 95 per cent. sugar, 4 per cent. tartaric acid and 1 per cent. moisture and colouring matter. In a sweetened product of this kind the acid present should be mixed with the requisite proportion of sodium bicarbonate, with or without magnesium carbonate, to produce a mixture which effervesces satisfactorily on the addition of water. On receiving a verbal intimation to this effect the retailer agreed to destroy the small amount of the remaining stock.

Potted Meat (2) (*Formal*).—One of these (No. 367/F) had the satisfactory meat content of 79 per cent. but the other contained only 50 per cent., equivalent to a 37·5 per cent. deficiency on an 80 per cent. unofficial standard which is regarded as a reasonable post-war minimum to demand of such a product. At the best it was only a poor quality "meat paste" for which a 55 per cent. meat content was required at the time of sale by the Meat Products, etc., Order, 1950/51, which, for Court purposes, however, allowed a tolerance of 5 per cent. down to an absolute 50 per cent. minimum.

Pepper (7).—Three were mixtures of pepper and flour, but two of these (one formal and one informal) were from the same source and involved an appreciable adulteration, whereas in the third only about 5 per cent. flour was present (No. 1027/L).

Legal proceedings were taken in respect of No. 996/L, an official sample bought from a retail firm of grocers who had purchased their supply under warranty from a sales representative, who had thus found a customer for a baker who had some surplus stock for disposal. The pepper contained at least 25 per cent. flour and not more than 75 per cent. genuine pepper, this being the first case of adulterated pepper met with during the previous 23 years. The baker, who was the third defendant in the case, was found guilty of selling pepper not of the quality demanded, fined £10 and ordered

to pay 3 guineas costs. In view of the high price of pepper (2s. to 2s. 6d. per oz.) it might be a matter of surprise that there has been so little adulterated pepper sold as the genuine article. A safe way of marketing pepper and flour mixtures has, however, been found through the so-called "pepper compounds" containing approximately 15 per cent. pepper and 85 per cent. other ingredients, mainly flour. Turmeric is sometimes added to restore the colour lost by the addition of the flour.

Golden Pudding Mixture (1).—(No. 975/F) (*Formal*).—This was a sweetened and coloured mixture of flour and semolina containing practically no self-raising power; it had become lumpy and mouldy. The retailer was notified and warned regarding the further sale of a product of this unsatisfactory quality.

Salmon Paste (3) (*Formal*).—One of these (No. 74/L) contained not more than 49·5 per cent. salmon, this representing a 10 per cent. deficiency on a 55 per cent. minimum.

Pork Sausage (12).—One formal sample (No. 846/F) contained permitted preservative without declaration at the time of sale. The retailer was warned.

Sweets (1).—(No. 586/F) (*Informal*).—The unpleasant taste experienced in these by a complainant was due to the coconut oil present having become slightly rancid. Their withdrawal from sale was recommended.

Sweet Ground Almonds (1).—(No. 1009/L) (*Formal*).—This consisted of ordinary ground almonds without any added sweetening material, contrary to what might have been implied by the description. It was considered that the article should have been sold either as "ground sweet almonds" or just plain "ground almonds" as ground bitter almonds are not a household commodity.

Contaminated Foods.—Several foods containing foreign substances were examined during the year, most of these being submitted through the Sampling Officers by householders. These included insufficiently washed chitterlings (No. 163/L and No. 179/L), dessicated coconut (No. 191/L) containing a small fragment of glass or a natural silicate and half a loaf of brown bread (No. 250/L) containing part of a dead mouse, a discovery which resulted in Court proceedings and the imposition of a £15 fine and £2 9s. 6d. costs upon the bakers responsible. The publicity given to this case may in part have been responsible for the suspicions aroused regarding the quality of certain other foods bought during the last nine

months of 1951. In some instances the fears proved groundless, for, whilst a tea-cake (No. 585/F) did contain a small piece of plaster, the fragments found in some canned crab meat (No. 598/F) were not broken glass, as alleged, but crystals of struvite (or magnesium ammonium phosphate) which is natural to shrimps, prawns, crab and salmon and specially tends to separate under cold conditions. Seven specimens of bread were reported upon adversely for containing such things as lumps of salt, dried fruit, blackened dough and black grease, and a packet of sultanas for being contaminated with mouse droppings (No. 1022/L). Finally, the presence of animal hairs in a meat pie was confirmed, but this might well have been due to inefficient trimming of the meat employed.

Of the genuine food samples mention may be made of the following :— thick, thin and sterilised cream, the sale of which was permitted during May and June only by the Food Standards (Cream) Order, 1951, and for which respective minimum contents of 48 per cent., 18 per cent., and 23 per cent. were required; Gran-Shan, a light brown drink containing 3 per cent. sugar flavoured with a herbal extract; Instant Sunchoc consisting of a mixture of 65 per cent. sugar, 33 per cent. cocoa and 2 per cent. flavouring; and Snowfil, intended for making a cream-like topping and containing a fat-extender (2·5 per cent.) and an emulsifier (1 per cent.) held in water.

The 8 samples of drugs were of satisfactory quality.

OTHER ANALYSES

Fertilisers.—Of the 19 samples analysed, one informal sample of Liquinure (No. 6/W) was 1 per cent. deficient in nitrogen, but a subsequent formal sample proved satisfactory.

Apart from the foregoing, analyses were carried out for eight other Corporation Departments as well as for the Hospitals. The work included analysis of a foam-forming liquid for the Baths Department, with advice as to how to produce the foam with material of known composition at a reduced cost; analyses of a scouring powder, a detergent and a steriliser for the Central Purchasing Department and of numerous alleged intoxicating liquors for the Police, apart from the monthly analyses of the city water supply.

Atmospheric Pollution.—The work has been continued throughout the year, observations having been made at the same seven stations as in 1950, but with no light test determinations.

The average results obtained are given in the following table :—

SITE.				Rain Gauges	Lead Peroxide Method
				Average monthly deposit in tons per sq. mile	Average daily sulphur pollution as micros. of SO_3 per 100 sq. cms. of fabric exposed
Headingley ..	..	..	..	20·7	2·1
Market Buildings ..	..	..	..	33·7	3·2
Hunslet ..	..	..	..	19·2	2·6
Temple Newsam ..	..	..	..	13·5	2·2
Armley Park ..	..	..	..	44·4	2·6
St. James's Hospital ..	..	..	..	19·9	2·6
Burley Park ..	..	..	..	59·5	..

The figures are similar to those for the previous three years, Armley Park and Burley Park continuing to suffer from the outpourings of the Kirkstall Power Station chimneys as in the past. Of the seven areas where observations have been made Temple Newsam tends to be the least contaminated, and, judged by the total deposits, there would appear to be little to choose between Headingley, Hunslet and St. James's Hospital as residential areas ! In the absence of a deposit gauge in Rounday Park, it is not possible to compare this latter area with the others studied.

The year under review is the last full one during which analytical work has been carried on in the laboratories at No. 1, Swinegate, for during the closing months preparations were being made for a removal to more extensive premises at No. 12, Market Buildings. At the time of writing this report the removal has been completed and it is intended to make a further reference to this in the next Annual Report.

A number of staff changes took place in the latter half of the year, due to outside preferments, the requisite replacements having been duly made.

In conclusion, I have much pleasure in extending to my Deputy, Mr. R. A. Dalley, F.R.I.C., and other members of the staff my sincere appreciation of their good services and loyal co-operation during the year under review.

FOOD AND DRUGS ACT, 1938.
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1951.

Article.	No. examined.			No. adulterated.			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Foods (2189)							
Almonds, ground ..	2	..	2	..	..	..	..
Apricots, Spanish ..	I	..	I	..	..	..	..
Arrowroot .. ..	..	I	I	..	..	..	..
Baking powder .. ..	..	I	I	..	I	I	100·0
Barley kernels ..	I	..	I	..	..	..	..
Barluze	I	..	I	..	..	..	..
Beer, bitter	7	I	8	..	..	..	..
,, black	I	..	I	..	..	..	..
,, mild	6	..	6	..	..	..	..
Biscuits, parkin ..	..	I	I	..	I	I	100·0
Blackcurrant cordial ..	I	..	I	I	..	I	100·0
Black Grape Jelly ..	I	..	I	..	..	..	..
Blancmange powder ..	2	..	2	..	..	..	..
Bread, brown .. ..	..	..	2	2	..	2	100·0
,, malt .. ..	..	I	I	..	..	..	..
,, teacake .. ..	..	..	2	2	..	2	100·0
,, white .. ..	..	..	8	8	..	6	6
Bun, iced	I	..	I	..	..	..	..
Butter	I	..	I	..	..	..	..
Butter, peanut	I	..	I	..	..	..	..
Cake mixture	2	..	2	..	..	..	..
Cakeoma	I	..	I	..	..	..	..
Calves feet jelly	I	..	I	..	..	..	..
Celery salt	I	..	I	..	..	..	..
Cheese spread	2	..	2	..	..	..	..
Cherries, glacé	2	..	2	..	..	..	..
Chitterlings .. ..	..	3	3	..	2	2	66·6
Chocolate, hot	I	..	I	..	..	..	..
,, spread	I	..	I	..	..	..	..
Chutney	4	..	4	..	..	..	..
Cocoa	I	..	I	..	..	..	..
Coconut cake flour ..	I	..	I	..	..	..	..
Coconut, dessicated ..	4	..	4	I	..	I	25·0
Coconut	I	..	I	..	..	..	..
,, ice	I	..	I	..	..	..	..
,, shredded in syrup ..	I	..	I	..	..	..	..
,, sweetened .. ..	..	I	I	..	..	..	..
,, tenderised ..	I	..	I	..	..	..	..
Carried forward ..	51	20	71	2	14	16	..

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1951—continued.

Article.	No. examined.			No. adulterated.			Per-cent age adultera- tion.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	51	20	71	2	14	16	..
Coffee	2	1	3	..	..	..	..
Coffee and chicory ..	3	..	3	..	..	..	..
Coffee, French ..	1	..	1	..	..	..	..
Coffee and chicory .. ..	..	..	..	..	..	..	..
sweetened	1	..	1	..	..	..	..
Componex pastry mix ..	1	..	1	..	..	..	..
Crab, dressed	1	..	1	1	..	1	100·0
“ meat .. ..	..	1	1	..	..	..	..
“ paste	1	..	1	..	..	..	..
Cream powder (synthetic) ..	1	..	1	..	..	..	..
“ thick	1	..	1	..	..	..	..
“ thin	1	..	1	..	..	..	..
“ sterilised	1	..	1	..	..	..	..
Curds, fresh	1	..	1	..	..	..	..
Custard Powder	4	..	4	1	..	1	25·0
Dandelion & Burdock .. ..	..	1	1	..	1	1	100·0
Dried mixed herbs	1	..	1	..	..	..	..
Dripping, beef	1	..	1	..	..	..	..
Dry ginger ale	1	..	1	..	..	..	..
Farinoca	1	..	1	..	..	..	..
Farola	1	..	1	..	..	..	..
Fat, Kosher cooking	1	..	1	..	..	..	..
Fish cakes	5	..	5	..	..	..	..
“ fried .. ..	..	1	1	..	..	..	..
“ paste	3	..	3	1	..	1	33·3
Foam crystals	1	..	1	..	..	..	..
Frizets	1	..	1	..	..	..	..
Gelatine	2	..	2	..	..	..	..
“ dessert	1	..	1	..	..	..	..
Ginger cordial	1	..	1	..	..	..	..
“ marmalade	1	..	1	..	..	..	..
Gluconis	2	..	2	..	..	..	..
Gran-shan	1	..	1	..	..	..	..
Gravy powder	1	..	1	..	..	..	..
Ground ginger	2	..	2	..	..	..	..
“ nutmeg	2	..	2	..	..	..	..
“ rice	3	..	3	..	..	..	..
Ham loaf .. ..	..	1	1	..	..	..	..
Carried forward	102	25	127	5	15	20	..

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1951—continued.

Article.	No. examined			No. adulterated.			Percentage adulteration
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	102	25	127	5	15	20	..
Horseradish cream ..	2	1	3	1	..	1	33·3
sauce ..	1	..	1	..	..	..	..
Instant Postum ..	1	..	1	1	..	1	100·0
" Sunchoc ..	1	..	1	..	..	..	..
Ice-cream ..	28	..	28	3	..	3	10·7
Jam, damson ..	..	1	1	..	..	..	..
" raspberry ..	1	..	1	..	..	..	..
" strawberry ..	1	..	1	..	..	..	..
Jelly crystals ..	2	..	2	..	..	..	..
" mint ..	2	..	2	1	..	1	50·0
" milk setting crystals	1	..	1	..	..	..	..
" pineapple ..	1	..	1	1	..	1	100·0
" table ..	2	..	2	..	..	..	..
Jellicup ..	1	..	1	1	..	1	100·0
Kali ..	1	..	1	1	..	1	100·0
Kola ..	1	..	1	..	..	..	..
Lard ..	4	..	4	..	..	..	..
Lemon barley ..	1	..	1	..	..	..	..
" cheese ..	1	..	1	..	..	..	..
" crystals ..	1	..	1	..	..	..	..
Lemonade crystals ..	1	..	1	..	..	..	..
Lemon curd ..	3	..	3	..	..	..	..
" juice ..	1	..	1	..	..	..	..
Lemonspred ..	1	..	1	..	..	..	..
Liquorice bullets ..	..	1	1	..	..	..	..
Margarine ..	1	..	1	..	..	..	..
Marmalade ..	..	1	1	..	..	..	..
Marzipan ..	1	..	1	..	..	..	..
Meat pie ..	..	1	1	..	..	..	..
" paste ..	3	1	4	..	..	..	..
" potted ..	2	..	2	1	..	1	50·0
Meat ..	1	..	1	..	..	..	..
Milk ..	1,840	17	1,857	47	5	52	2·8
" full cream dried ..	..	1	1	..	..	..	..
" whipping compound ..	1	..	1	..	..	..	..
Mincemeat ..	2	..	2	..	..	..	..
" dry ..	1	..	1	..	..	..	..
Mixed cut peel ..	1	..	1	..	..	..	..
Carried forward ..	2,014	49	2,063	62	21	83	..

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1951—continued.

Article.	No. examined.			No adulterated.			Per centage adultera-tion.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward . .	2,014	49	2,063	62	21	83	..
Mixed spice . .	I	..	I	..	..	..	..
Mustard sauce . .	I	..	I	..	..	..	..
Noodles . .	I	..	I	..	..	..	..
Onion powder . .	I	..	I	..	..	..	..
Orange Squash . .	2	..	2	..	..	..	..
Pancake and batter mixture . .	I	..	I	..	..	..	..
Parsley . .	I	..	I	..	..	..	..
Peas, dried . .	3	..	3	..	..	..	..
Pearl barley . .	I	..	I	..	..	..	..
Pepper . .	6	I	7	2	I	3	4.3
Pepper flavoured compound . .	2	I	3	..	..	..	..
Pickle, sweet . .	I	..	I	..	..	..	..
Polony . .	3	..	3	..	..	..	..
Pineapple syrup . .	I	..	I	..	..	..	..
Pudding, Christmas . .	2	..	2	..	..	..	..
" Golden mixture	I	..	I	I	..	I	100.0
" Steamed mixture	I	..	I	..	..	..	..
" Sponge mixture	I	..	I	..	..	..	..
" Sweetened . .	I	..	I	..	..	..	..
" Spice . .	I	..	I	..	..	..	..
Puffs, jam . .	I	..	I	..	..	..	..
Quinine Tonic water . .	I	..	I	..	..	..	..
Rice Cremola . .	I	..	I	..	..	..	..
Rice . .	I	..	I	..	..	..	..
Sage . .	2	..	2	..	..	..	..
Sago . .	I	..	I	..	..	..	..
Salad Cream . .	2	..	2	..	..	..	..
" dressing . .	I	..	I	..	..	..	..
Salmon paste . .	3	..	3	I	..	I	33.3
Sandwich spread . .	I	..	I	..	..	..	..
Sausage, beef . .	7	..	7	..	..	..	..
" meat, beef . .	5	..	5	..	..	..	..
" pork . .	II	I	I2	I	..	I	8.3
" meat, pork . .	2	..	2	..	..	..	..
" Tomato . .	I	..	I	..	..	..	..
Sauce, fruit . .	I	..	I	..	..	..	..
Carried forward . .	2,087	52	2,139	67	22	89	..

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1951—continued.

Article.	No. examined.			No. adulterated.			Percentage adulteration
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	2,087	52	2,139	67	22	89	..
Semolina	2	..	2	..	..	..	..
Snowfil	I	..	I	..	..	..	..
Soup, chicken noodle ..	I	..	I	..	..	..	..
,, cream of chicken ..	I	..	I	..	..	..	..
,, powder	I	..	I	..	..	..	..
Sponge mixture	I	..	I	..	..	..	..
Stuffing, Sage and onion ..	4	..	4	..	..	..	..
Suet, beef.. ..	I	..	I	..	..	..	..
Sugar .. ..	..	I	I	..	..	..	..
,, icing	I	..	I	..	..	..	..
Sultanas .. ..	..	I	I	..	I	I	100·0
Sweet ground almonds ..	I	..	I	I	..	I	100·0
Sweetened dried fruit ..	I	..	I	..	..	..	..
Sweet turnover .. ..	..	I	I	..	..	..	..
Sweets .. ..	..	I	I	..	I	I	100·0
Tapioca dessert	2	..	2	..	..	..	..
Tarts, jam	3	..	3	..	..	..	..
,, lemon cheese ..	I	..	I	..	..	..	..
Tea	2	..	2	..	..	..	..
Tea saving tablets .. ..	..	2	2	..	I	I	50·0
Tomato juice	2	..	2	..	..	..	..
,, piquant	I	..	I	..	..	..	..
,, ketchup.. ..	2	..	2	..	..	..	..
Vermicelli	I	..	I	..	..	..	..
Non-brewed condiment ..	2	..	2	..	..	..	..
Vinegar, distilled malt ..	I	..	I	..	..	..	..
malt	4	I	5	..	..	..	..
Whisky	5	I	6	..	..	..	..
Wine, raisin	I	..	I	..	..	..	..
DRUGS (8)							
Aspirin tablets	2	..	2	..	..	..	..
Bicarbonate of soda	I	..	I	..	..	..	..
Brompton cough lozenges ..	I	..	I	..	..	..	..
Cascara Sagrada tablets ..	I	..	I	..	..	..	..
Cream of Tartar	I	..	I	..	..	..	..
Epsom salts	I	..	I	..	..	..	..
Kruschen salts	I	..	I	..	..	..	..
TOTAL FOOD AND DRUGS ..	2,137	60	2,197	68	25	93	4·2